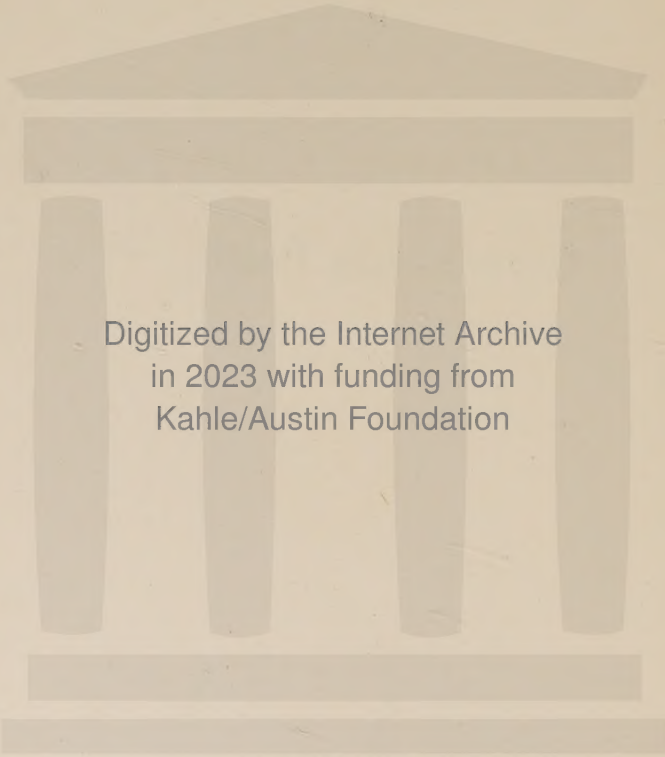


Lachlan Mackenzie

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Corporation Profits



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Corporation Profits

A Study of their Size, Variation,
Use, and Distribution in a
Period of Prosperity

By

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DAZZLING ADVENTURE"



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CORPORATION PROFITS

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First Edition

B-D

INSCRIPTION

*This is hardly the kind of a volume that
one dedicates to a friend. The subject
matter is rather too stern. If it were
appropriate material for dedication, it
would be faithfully inscribed to a wise,
generous and inspiring counselor in
matters economic*

L. L. B.

ACKNOWLEDGMENT

THE following study has proved an arduous and exacting task. Lacking the extensive facilities, the invaluable files and the coöperation of the members of the staff of the Standard Statistics Company, it would have been so much greater than it actually turned out to be, as to have rendered its accomplishment well-nigh impossible. The writer is especially indebted to Mr. Harold G. Parker, whose long experience with corporation statements and astounding knowledge of corporation accounting practice have been ruthlessly and frequently drawn upon; to Mr. Clayton A. Penhale for many helpful suggestions and for an abiding sympathy; to Mr. Charles A. Schmutz and Mr. Stanley N. Shaw, whose familiarity with current industrial conditions has proved a source both of great value and of decided convenience; and to Mr. R. Bruce Brownlee, Mr. Ivan S. Dobson, Mr. Carleton I. Washing, and Mr. John Raiteri, who found the spark of life in dull columns of figures and who bravely and painstakingly worked through the tens of thousands of calculations which were preliminary to the announcement of aggregate results.

The illustration on the jacket is reproduced by the kindness of *Nation's Business* and the artist, Mr. Wilfred Jones.

In somewhat—but not greatly—different form, this study was originally published as a series of special supplements to Standard Trade and Securities Service, where it carried the title: “Beneath the Surface of Corporation Statements.”

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Corporation Profits

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CHAPTER I

A BEGINNING

THIS book in considerable measure deals with accounting, but in a rather strange fashion.

It is about accounting, but is not a book on accounting. It examines the *results* of accounting: takes up the work of the professional accountant where he himself leaves off, seeks to determine the meaning of what his figures report, so far as possible, and seeks likewise to differentiate between meaning and confusion.

The viewpoint, then, is not that of the accountant, but of the average business man, banker, or financial executive who must make decisions, wholly or partially, on the basis of the information which the accounts give him. More precisely, it is the viewpoint of those who must make decisions *relative to security values*, based either wholly or partially upon the facts set forth by accountancy.

The financial statements (*i.e.*, income ac-

counts and balance sheets) of about 550 leading American industrial concerns, operating in virtually all important lines of business except the public-utility and railroad fields, have been selected for study. The term "industrial concern" is here used in the stock market sense, which for convenience divides the corporation world into three broad groups—rails, utilities, and industrials—and includes in the industrial group every kind of business enterprise which may not properly be assigned either to the rail or to the utility group.

An idea of the adequacy of the material with which we propose to deal is suggested by the fact that the group of corporations which it has been found possible to study intensively and on a comparable basis had, in 1927, an aggregate net profit amounting to about $2\frac{1}{2}$ billion dollars. The total net profit returned in that year by all corporations in the United States probably amounted to around 7 billions. Our data, therefore, probably represents fully one-third of the corporation data for the entire country.

The corporations on our list paid nearly 2 billion dollars to their bond and stockholders last year, and evaluated their property at more than $17\frac{1}{2}$ billions.

Purposes of the Study.—The purpose of such a study are so obvious that they need not be stated

in detail. Among the outstanding objectives are the following:

(1) To provide a unit of comparison which will be of at least some value to those who are constantly under the necessity of analyzing corporation statements, and of formulating, as a result of such analysis, an opinion which becomes the basis for future business decisions.

Admittedly, such a unit of comparison will not constitute an exact yardstick. It must be tentative and relative. The fact that the invested capital of the average industrial concern is, say, 25 per cent in bonds and preferred stock, 50 per cent in common stock, and 25 per cent in surplus, does not in itself signify that the individual corporation which has only 10 per cent in bonds and preferred stocks has a stronger capital situation than the average, or that the individual corporation which has as much as 50 per cent in these preferred classes of securities has a weaker situation than the average.

But having available a mathematical record of the average situation, one likewise has therewith at least a pivot for subsequent analysis of individual situations. Radical deviations from the average will, if they do nothing more, suggest the advisability of closer analysis (a) to explain the radical deviation and (b) to determine whether it is justified by peculiar conditions.

(2) To provide the basis and the incentive for explaining and analyzing radical individual deviations from the average is, indeed, one of the primary purposes of this series of studies. We know that it will be possible to establish the average, and we believe that it will be possible to suggest methods by which the average data can be used, in practical business and financial work, in appraising the significance of radical individual deviations.

(3) Moreover, it is our purpose, wherever possible, to carry the study somewhat beyond the realm of aggregates only, and at least to suggest standards which are applicable to important lines of business activity—automobiles, coal, copper, building, food products, machinery, etc.

(4) And it will likewise be possible, we believe, to make at least some headway in the task of explaining why financial situations in different lines of business differ so widely one from the other, and in determining to what extent such differences are sound, or to what extent they are dangerous.

In a word, we propose to set forth a composite income account and a composite balance sheet for a list of industrial corporations which apparently account for somewhere around a third of the country's total corporate net profit; to break down these composite data into series applicable

to different leading lines of industrial activity; and then to experiment with the problem of appraising radical individual deviations from these series of averages—all to the end, and in the hope, that some small contribution at least may therewith have been made to current business knowledge and prospective business practice.

The whole problem lies in the field of corporation profits. Corporate income accounts and balance sheets report the size, use and distribution of profits and other capital accretions. After these data have been made available in convenient form, it is the task of economic analysis to explain the variations in profits from year to year, from one line of industry to another, from one individual business concern to another.

To some extent, at least, the study will break virgin ground. The basic material itself is, of course, not new. But the adequacy of the material, the method of handling it which has been adopted, the bringing of it together in composite form, the intensive study of the different items in the composite and of their relationship to one another, mark, we believe, a somewhat new departure in the study of corporation finance.

The accompanying study itself, of course, constitutes no more than a mere beginning, a pref-

ace, to the analysis of data of this kind. Much more work, and on a broader scale, remains to be done.

The chief deficiency of this volume, it should be frankly pointed out, is that for the most part the data cover only two years—1926 and 1927. Study of a longer period would, it goes without saying, be of greater value. But the task of assembling data for even the two years 1926 and 1927 has been no light one. Our feeling has been that some contribution to the existing knowledge of such matters is possible even though the time period covered is brief, and we have been able to derive a certain amount of consolation from the further opinion that, regardless of the brevity of the period, the data themselves and the many derivative calculations present for the consideration of the average student of financial affairs as big a mouthful of problems as he will care to bite off in any single volume.

CHAPTER II

THE COMPOSITE INCOME ACCOUNT

ACCOMPANYING is the composite income account, covering the years 1926 and 1927, reflecting the aggregate condition of the 545 leading industrial corporations which it was found possible to compare.

The country's two largest industrial concerns, the United States Steel Corporation and the General Motors Corporation, accounted for some 14 per cent of the aggregate net profit of these 545 industrials last year. Therefore it has been deemed wise to compute results on two bases—to show the aggregate situation for the 545 concerns together, and then to supplement these data by a composite income account statement which excludes Steel and Motors.

The same division has been made in all subsequent calculations, but in the majority of cases the second calculation has been found to be without great significance; in such cases of course, only the results for the full 545 corporations will be reported.

In the accompanying section of the analysis,

we shall undertake to explain the *changes* which occurred in the composite income account in 1927 as compared with 1926. In the section immediately following we shall deal with the *changes* which occurred in the composite balance sheet as between these same two years. All additional sections in the study will be devoted to the more important individual items in the income account and balance sheet.

The 1927 Decline in Profits.—In the fact that 1927 business profits registered a substantial decline as compared with the year preceding there is nothing new to those who customarily follow the regularly published corporation statements.

The *extent* of the 1927 decline, however, becomes progressively more surprising. On the basis of reports by 455 leading corporations (excluding Motors and Steel) which had been made public up to the middle of April, 1928, the Standard Statistics Co. computed 1927 net income to have declined just 10 per cent, as compared with 1926. But the addition of 88 more concerns to this list brings the total 1927 decline up to 16.2 per cent.

This is a strikingly large figure. The fact that such an extensive drop could have occurred in a year which is generally conceded to have been a prosperous one is no less striking than the fact that the extent of the drop was not known

TABLE 1

Composite Income Account ***545 INDUSTRIAL CORPORATIONS**

	1926 (in Million Dollars)	1927	Per Cent Change
Net profit	\$2,810.92	\$2,490.26	—11.4%
Fixed charges	223.46	250.24	+12.0
Net income	2,587.46	2,240.02	—13.4
Preferred dividends ..	259.49	241.53	— 7.0
Common dividends ..	1,292.07	1,389.84	+ 7.6
Total payments to security holders ...	1,775.02	1,881.61	+ 6.1
Carried to surplus ...	867.62	474.54	—45.4
Earned per \$100 of invested capital ...	\$10.6	\$9.0	—15.1%

TABLE 2

Composite Income Account ***543 INDUSTRIAL CORPORATIONS, EXCLUDING GENERAL
MOTORS AND U. S. STEEL CORPORATIONS.**

	1926 (in Million Dollars)	1927	Per Cent Change
Net profit	\$2,489.55	\$2,149.18	—13.7%
Fixed charges	204.99	233.17	+13.3
Net income	2,284.56	1,917.01	—16.2
Preferred dividends ..	226.62	207.20	— 8.6
Common dividends ..	1,152.56	1,205.19	+ 4.5
Total payments to se- curity holders	1,584.17	1,644.56	+ 3.9
Carried to surplus ...	841.70	363.13	—56.8
Earned per \$100 of invested capital ...	\$10.4	\$8.6	—17.5%

* For definitions of terms used in this table, please refer to pages 18-20, following.

until fully six months after the close of the calendar year.

A number of years' experience in analyzing profits data has strongly suggested the conclusion that the corporations which have the best results to report make those results public promptly, while those which have the poorest showings to report are customarily quite tardy in breaking the news. The foregoing data give still further emphasis to this principle.

Although it has not been feasible to trace the financial histories of the full list of corporations used in this series of studies back over a long period of years, there is basis for the belief that the 1927 decline in net earnings was sharper than in any single year in any previous period of general prosperity. Tests based upon about 100 corporations, rather than upon the full list, validate this assumption.

Reasons for the Lower Earnings.—The reasons for the 1927 slump are now well known: the total volume of industrial output was smaller than in 1926; the trend of commodity prices was mainly downward; the *margin* of profit was smaller; acute depression existed in such important lines as oil, railroad equipment, coal, shipping, textiles and radio, and unsatisfactory (although not really depressed) conditions

existed in such lines as automobiles, nonferrous metals, steel, meat packing, etc.

Although results for the full year 1928 will not be known until the late summer of 1929, the assumption that a substantial recovery in industrial profits occurred in 1928 appears quite valid. Preliminary indications are that 1928's aggregate industrial profits will turn out to be even in excess of those achieved in the record-breaking year 1926.

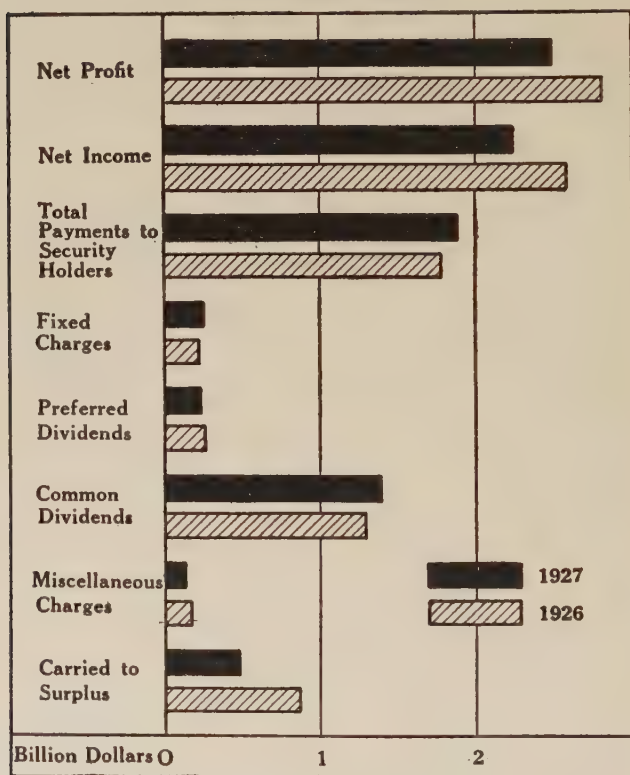
It should also be pointed out that the 1927 decline in profits, although drastic in itself, was from an abnormally high level. In the main, it must be conceded that 1927 profits, even though they were much lower than in the year previous, were generally adequate. The majority of industrial concerns were able to cover their dividend charges comfortably. Under such conditions, a drop in earnings assumes considerably less importance than it would assume at times when, say, a decline of 12 per cent or more might easily create a situation of real distress.

Fixed Charges.—As explained in our definitions of terms on page 18 following, we use the term "fixed charges" to designate all interest paid (interest on bank loans, on notes outstanding and on funded debt) and also sinking fund charges and bond discounts.

The aggregate funded debt of the 545 con-

cerns here under study increased sharply during 1927, as will be revealed by the composite balance sheet to be presented in the next section.

**Comparison of Leading Income Account Items,
1926 and 1927.**



But last year's increase in fixed charges, amounting to 12 per cent, was even greater than the increase in funded debt.

The excess in the fixed charges increase was in the main accounted for by an expansion in bank loans, and by discounts paid in connection with the flotation of new bond issues and refunding operations.

Superficially, it would seem that in a year such as 1927, when business profits were moderately good and when interest rates were low, fixed charges should have decreased. But this premise omits to take account of the borrowing habit. Many economists hold that, over a period of time, American business will borrow all the money it can get and, ultimately, more than is good for it.

The fixed charges of business undoubtedly increase more rapidly when interest rates are low than when they are high. It SHOULD be the other way. But it isn't. The constant tendency to expand the VOLUME of borrowing more than counteracts the benefits of lower interest rates.

We shall give further attention to this phase of the corporation financial problem when we consider the size of funded debt in the next section.

Dividends on Preferred Stock.—Preferred dividends paid by 545 industrials last year decreased about 18 million dollars, or 7 per cent. The chief reasons for this decrease were as follows:

(1) Eleven corporations on our list which had

been making regular payments on their preferred stock in 1926 were obliged either to omit or to reduce such payments in 1927. To most of these 11 companies, depression in 1927 was not a new experience. They had been familiar with it for several years previously. Gradually, the ill effects of the situation had become cumulative. The unsatisfactory trend of profits last year merely hastened the climax. Unfavorable action by these concerns accounted for a decrease of about $7\frac{1}{4}$ millions in total payments to preferred stockholders.

(2) About 7 millions of the apparent decrease in 1927 preferred dividends was accounted for by the fact that, in 1926, three large concerns (Case Threshing Machine Co., Goodyear Tire & Rubber Co. and Federal Mining and Smelting Co.) paid off back preferred dividends that had accumulated, and made only the regular payments in 1927.

Our data contain no suggestion whatever, therefore, that the 1927 sharp decline in earnings was sufficient to endanger the positions of other than a very few industrial preferred stocks; nor do they contain any forecast that a seriously weakened situation is in near term prospect.

In fact, the precise reverse is the case. The majority of seasoned industrial preferred stocks

are steadily working into a position that is stronger than at any previous time. Retirement is gradually reducing the volume of such stock outstanding, equities are increasing and earning power is adequate. A considerable number of issues in this group have reached a point where, for all practical purposes, it may be assumed that the safety of dividends is as secure as is the interest on bonds.

But this does not mean that any preferred stock is ever so high grade that it does not need to be constantly watched and checked. At least three of the stocks upon which preferred dividends were passed in 1927 were, a few years ago, regarded as strictly high grade.

Common Dividends and Surplus Earnings.— Holders of industrial common stocks apparently received more money in the form of cash dividends in 1927 than in any previous year.

Total payments of our 545 companies, amounting to more than 1 1/3 billions, were 7.6 per cent greater than in 1926. And previous calculations made by the Standard Statistics Co. had indicated that 1926 industrial common dividends established a new record to date.

The greatest surprise in our composite earnings statement comes with the disclosure that the amount available for surplus last year, after all payments to security holders had been made,

was in the aggregate 45 per cent smaller than in 1926 in the case of 545 companies, and was almost 57 per cent smaller in the case of 543 companies (omitting General Motors and U. S. Steel). The 545 companies reported only 19 per cent of their 1927 net profit available for surplus; the 543 companies, only 17 per cent.

The explanation is obvious: lower profits, higher fixed charges, higher common dividends.

Over a period of years, we believe that it would be an extremely dangerous program for American industry to pay out 80 per cent or more of its net profit to security owners, as our 545 leading concerns did in 1927. A margin considerably greater than 20 per cent should be saved (a) against future evil days; (b) for improvements and expansion.

But we find little that is alarming in this particular situation as applicable to the year 1927. Four or five years of good average earnings preceded 1927; considerably more had been carried to surplus in each of these previous years than was so carried over in 1927. The financial position of the average large industrial concern was not weak in 1927, but extremely strong.

Moreover, cash on hand increased substantially during 1927; property value increased at about the normal annual rate; inventories were about stable.

And further, there are a number of important American industrial concerns (although this group is quite in the minority) which have now become, for all practical purposes, "finished products." Expansion programs which in some cases have been in the process of development over a period of twenty years or more have been very nearly completed. Although large appropriations for depreciation and renewals must be set aside in the future, it still remains true that some concerns have made so much progress with their expansion programs that they will be able, with entire conservatism, consistently to pay higher returns to their common stockholders during, say, the next decade than they have been able to pay during the past decade.

20% Saved Is Not Normally Safe.—Much depends upon the position of the individual concern. *But certainly it may be set down as a basically sound assumption that the AVERAGE American industrial corporation cannot, with safety, retain as little as 20 per cent of its net profit over a period of years.* A certain number of particularly fortunate and successful concerns can do so. But they constitute the exception rather than the average.

If as prospective security purchasers we were analyzing the long term earnings records and financial policies of a given group of industrial

concerns, we should certainly scrutinize with the greatest care that concern which had retained no more than 20 per cent of its earnings over a period of time, and as a general proposition we should lodge still greater confidence in the position of the concern which customarily retains more than 30 per cent of its net.

On the face of the facts it is in most cases, although not always, a bad sign if a given industrial concern does not feel the *need* of retaining more than 30 per cent of its net profit, because this in itself is an indication that future expansion probabilities are limited. At the same time, it is a bad sign if a concern *needs* to retain more than 30 per cent, *but fails to do so*. As suggested above, there always will be exceptions to this generality; the fact that there are such exceptions does not obviate the necessity for striving to determine whether each exception is justified.

Explanation and Definitions of Terms

Net profit.—Income after depreciation and taxes, but before fixed charges. Usually computed by deducting operating expenses, depreciation and taxes from gross income.

Fixed charges.—All interest paid, including that on bank loans, notes outstanding, and funded debt, plus sinking fund requirements,

bond discount, and guaranteed subsidiary dividends.

Net income.—Net profit minus fixed charges. This is the sum available for payments to stockholders.

Preferred dividends.—Cash only.

Common dividends.—Cash only.

Total payments to security holders.—The sum of fixed charges, preferred dividends, and common dividends. Since fixed charges include bank interest and bond discount, however, this term does not precisely describe the value referred to. But in their published statements, most concerns do not differentiate between the various kinds of interest paid. Moreover, the proportion of fixed charges which goes to other than bond holders is relatively small, so that the term “total payments to security holders” is sufficiently correct for all practical purposes.

Carried to surplus.—It will be noted that the sum carried to surplus is not as great as the difference between net profit and total payments to security holders. This is due to the fact that a number of concerns ordinarily make adjustments for miscellaneous charges before the annual credit to surplus is made. In 1927, such miscellaneous charges amounted to 5.39 per cent of net profit.

Earnings on invested capital.—Net profit, divided by invested capital, which is taken as the sum of the par or stated balance sheet value of all securities outstanding, plus surplus.

Source of data.—The official records of the corporations utilized in the study. In most cases, data are as of the close of the calendar year. Where a fiscal year does not precisely coincide with the calendar year, the data are reported under the calendar year containing the majority of months of the particular fiscal year.

CHAPTER III

THE COMPOSITE BALANCE SHEET

THE first section of the accompanying table details the chief balance sheet items for the 544 of the 545 leading industrial concerns selected for detailed analysis in connection with this series of special studies. For reasons which will be explained later, it has been necessary to omit Standard Oil of New Jersey from the balance sheet tabulation.

The second section of the table provides the basis for comparison of the so-called book values with the market values of the common stocks of 524 of the 544 corporations included in the balance sheet study. In the book value-market value compilation, it has been found necessary to eliminate a few of the concerns included in the balance sheet tabulation, either because there is no public market for their common stocks or because their published reports do not lend themselves to a comparison of this sort.

It is the purpose of this section of the analysis to study these two composites in detail. *Preliminarily, it may be said that in virtually all*

important particulars the composite balance sheet reflects an extremely strong financial situation among leading industrials.

In most of the items in which there should have been improvement in 1927 as compared with the year previous, improvement actually occurred. Property value, cash, net current assets, and net working capital all disclosed in-

TABLE 3

Composite Balance Sheet Items *

544 INDUSTRIAL CORPORATIONS, INCLUDING GENERAL MOTORS AND U. S. STEEL CORPORATIONS, BUT EXCLUDING STANDARD OIL COMPANY OF NEW JERSEY

CHIEF ASSETS	1926 (in Million Dollars)	1927	Per Cent Change
Property account.....	\$16,455.35	\$16,946.21	+ 3.0
Cash and equivalent..	3,112.12	3,389.52	+ 8.9
Accounts receivable...	2,547.50	2,397.59	- 5.9
Inventory	5,223.99	5,252.68	+ 0.6
Total current assets..	10,883.61	11,039.79	+ 1.4
CHIEF LIABILITIES			
Funded debt	3,669.35	3,866.55	+ 5.4
Preferred stock.....	3,326.27	3,442.08	+ 3.5
Common stock	11,717.82	12,274.77	+ 4.7
Surplus	6,602.90	6,731.65	+ 2.0
Total invested capital	25,316.34	26,315.05	+ 4.0
Bank loans and equiv-			
alent	391.12	433.18	+10.7
Total current liabilities	2,441.04	2,411.49	- 1.2
Net working capital	8,442.57	8,628.30	+ 2.3

* For definitions and explanation of terms used in these tables please refer to page 40, following.

creases. Accounts receivable and current liabilities registered decreases. Inventories remained about stable.

The inclination to borrow more money was further emphasized by a $5\frac{1}{2}$ per cent increase in funded debt and a $10\frac{2}{3}$ per cent increase in bank loans. But even though these increases appear large when reported in percentage terms, it is still true that total funded debt and bank borrowings represent a quite conservative fraction both of total invested capital and of property valuation.

It appears to be a fair conclusion that, at the end of 1927, the general financial condition of the average large industrial concern here under

TABLE 4

Book Value and Market Value of Common Stock*

524 INDUSTRIAL CORPORATIONS, INCLUDING GENERAL MOTORS AND U. S. STEEL CORPORATIONS, BUT EXCLUDING STANDARD OIL COMPANY OF NEW JERSEY

	1926 (in Million Dollars)	1927 Dollars)	Per Cent Change
Approximate book (or equity) value of common stock	\$18,150.26	\$18,828.31	+ 3.7
Market value of common stock outstanding, end of each year	24,960.40	31,725.20	+27.1
Market value of common stock August 1, 1928	\$34,777.00		

* For definitions and explanation of terms used in these tables please refer to page 40, following.

study was stronger than at any time in recent years—perhaps stronger than at any time in our economic history.

Explanatory.—For the most part, the data as presented in the tables on the preceding pages speak for themselves and need scant qualification or explanation. It should be pointed out, however, that although we shall for brevity and simplicity refer to the balance sheet data as constituting a composite balance sheet, they do not in reality constitute a true balance sheet. The assets side does not balance the liabilities side—for the simple reason that certain relatively unimportant items have been omitted, on both sides, in compiling the composite.

It will be recalled that in the previous chapter we presented two composite income account statements—one including our 545 corporations, and a supplementary one based upon 543 concerns, excluding General Motors and United States Steel Corporations. This was done because the figures for these two big concerns weighted the total so heavily that a different result was disclosed by the calculations omitting these two.

For purposes of the present section of the study, it has been found unnecessary to present the supplementary table; the percentage change in virtually all balance sheet items has been

found to remain approximately the same, regardless of whether Motors and Steel are included or excluded. So in the data as here presented these two big concerns have been included in all cases.

Due to the fact that the Standard Oil Company of New Jersey experienced a radical readjustment program in 1927, and as a result thereof materially altered its accounting methods in that year, it has been found necessary to omit this company entirely from the balance sheet study. Whenever aggregate balance sheet items are compared with aggregate income account items, Standard Oil Company of New Jersey will, of course, be omitted likewise from the income tabulation.

Property Account.—The 1927 increase in property valuation (amounting to almost 500 million dollars, or 3 per cent, for the 544 concerns here under study) was apparently at about a normal prosperity-period rate.

This increase, it will be noted by consulting other items in the composite balance sheet, was about $2\frac{1}{2}$ times greater than the 1927 increase in funded debt. Funds raised by the sale of securities, along with profits, always constitute the two chief sources of revenue from which property improvements and extensions are made.

It is often dangerous and always unsatisfactory to attempt to subject a given corporation's property account to close statistical analysis. Value, as stated in the balance sheet, is not a matter of fact but one of judgment. Corporation A may find it to its purpose to overstate the case, B may find it desirable to understate, while C may find it proper to attempt as fair a guess as can be made.

Practices relative to crediting and debiting the property account during a given year vary widely from one corporation to another. Capital charges, especially those incurred in the renewal and replacement of mechanical equipment, are often regarded as operating costs. Not only does accounting practice vary from one concern to another, but a given concern's policies will vary considerably over a period of years. There is no consistency in the handling of the depreciation account.

Perhaps chaotic would be too strong a word to apply to the aggregate situation as it concerns the policies of various concerns in evaluating their property. But policies in this respect are assuredly lacking in uniformity; they are often confusing, and often actually deceptive. And, strange as it may seem, it appears to be a badge of honor, the earmark of conservatism, for a

corporation which has, say, a 10 million dollar property to carry that value, on its published balance sheet, at 5 or 6 millions.

One of the advantages of a big composite such as we are dealing with here is that, when we throw everything into the same pot and look only at the amalgamation, we tend to eliminate most of the individual irregularities.

Hence it is probably true that, at the close of 1927, the aggregate value of the physical property of our 544 leading corporations really was somewhere in the neighborhood of 17 billions. Even accepting the figure as a rough approximation, it will provide the basis upon which we may compute, in a later analysis, the percentage of assets which various important lines of business find it necessary to place in physical equipment to earn a given amount of net income.

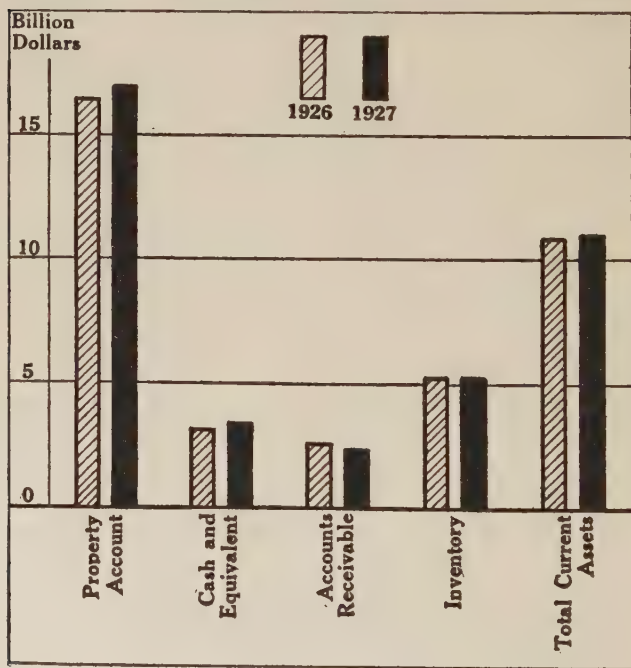
Cash.—The cash account is much more exact, although even this item contains a certain element of error. In it we include marketable securities, as evaluated by the corporations themselves in their balance sheets. Often this valuation is based upon cost, rather than upon the current market.

But we judge that at its greatest possible extreme the error arising in this instance could not amount to more than 5-7 per cent. The cash

account, as carried in our composite balance sheet, may therefore be accepted as exact for all practical purposes.

It is little short of amazing to discover that our 544 industrial concerns were carrying cash and equivalent in excess of 3 1/3 billion dollars at the end of 1927, and that this asset item increased by nearly 9 per cent during the year, despite the sharp decline in profits and despite

Chief Asset Items In Composite Balance Sheet



the expansion in the total amount paid out to security holders.

The figure has a direct bearing, moreover, upon a problem which intensively engaged the financial community's attention throughout 1928—the loans of “all others” (mostly corporations) to the stock market. The New York banks were actively striving to control these loans of “all others,” which in mid-1928 amounted to something over 1.8 billions.

The corporations which we are here studying, being the largest and most prosperous, are undoubtedly in a relatively stronger cash position than the average corporation throughout the country as a whole. But, even so, it is inconceivable that they could have possessed at the end of 1927, more than half of the country's entire corporate cash reserve.

It must be true, therefore, that all industrial, rail, and utility companies had on the average, in 1927, well over 7 billions in cash reserve; perhaps the amount might run up as high as 10 billions, although obviously these are nothing more than very broad guesses.

To try to keep a substantial portion of this corporate cash out of the call market when rates are relatively high is well-nigh as futile as trying to sweep the sea back with a broom. It will be different when inventories are increasing

rapidly, or when accounts receivable are being materially expanded (*i.e.*, when corporations themselves are supplying an increasing amount of credit to their customers). It will be different when the volumes of production and payrolls are expanding sharply.

But with commodity prices comparatively stable, with inventories, volume of production, and payrolls showing no important expansions, and especially with call rates relatively high, a certain amount of these large reserves automatically press upon the security markets for employment. They will continue to do so until the cash is needed for other purposes or until more profitable employment in other sources develops. But when other needs do develop, the return flow of funds from the call market to corporation treasuries will be rapid and decisive.

The relation of the cash account to other balance sheet items, and the factors which occasion important changes in the size of the cash account from time to time, will be discussed in a later chapter.

Accounts Receivable and Inventories.—The credit extended by corporations to their customers declined appreciably in 1927, despite the fact that the trend of *bank* credit during the year was a steadily rising one. Hand-to-mouth buy-

ing and the reduction in the total volume of business handled were the two principal factors accounting for this decline.

Our calculations of this item throw a certain amount of light, we believe, upon the installment-selling bugaboo. The clear suggestion is that this institution has now become organized in such a way that the average industrial corporation is allowing someone else to carry the load. *Had the situation really become a menacing one, aggregate industrial receivables could not have declined by some 6 per cent.*

Inventories held about stable not because the average corporation has become inherently more conservative, but because there was no purpose whatsoever, either in 1926 or in 1927, for increasing aggregate stocks of goods. It will be a different story when commodity prices begin to experience their next major upswing.

Current Assets—Current Liabilities.—Precisely as it should have been, to reflect a stronger financial condition at the end of 1927 than at the end of 1926, total current assets of our 544 corporations increased during the first-named year, while total current liabilities declined. In neither case was the change of great proportions, but the net result of the two movements was to effect a 12 point increase in the ratio of current

assets to current liabilities. These ratios compute as follows:

	Ratio
1926	4.46 to 1
1927	4.58 to 1

These strike us as useful figures. They provide a measuring rod which can be applied to individual situations. The character of a given concern's business will in great measure determine its assets-liabilities ratio. *But knowing that 544 leading industrial concerns had current assets 4.6 times greater than current liabilities, at the end of 1927, it behooves those who are studying the financial position of an individual concern to question and explain any wide deviation from this average ratio.*

Funded Debt and Bank Loans.—The total 1927 increase in funded debt and bank loans of 544 concerns amounted to about 240 millions. Twenty-two important concerns each increased its bonded debt by 5 millions or more. The most common reasons occasioning these additional borrowings were:

- (1) Trade depression, necessitating new working capital;
- (2) Expansion of physical assets;
- (3) Elimination of all, or a substantial proportion of, bank indebtedness;

- (4) Cancellation of preferred stock, and substitution therefor of bonds bearing a lower coupon.

The most common reasons for the increase in aggregate bank indebtedness were expansion programs (which can, of course, be financed only temporarily by bank borrowings) and trade depression. Thirteen important companies, 8 of which were in an uncertain financial position, together increased their bank borrowings by more than 80 millions. Numerous other concerns reduced their bank indebtedness, so that the net result was an addition of only 42 millions for 544 corporations.

Total funded debt of our 544 industrial corporations (many of which have no outstanding bonds whatsoever) now aggregate about 15 per cent of total invested capital, and some 23 per cent of total property value. Certainly neither figure is an excessive one. The interesting point is that this funded debt *continues* to increase.

Preferred Stock.—The net increase in the outstanding preferred stock of these corporations, amounting to $3\frac{1}{2}$ per cent, was on a dollar basis approximately equal to one-half of the combined 1927 increase in funded debt and bank loans.

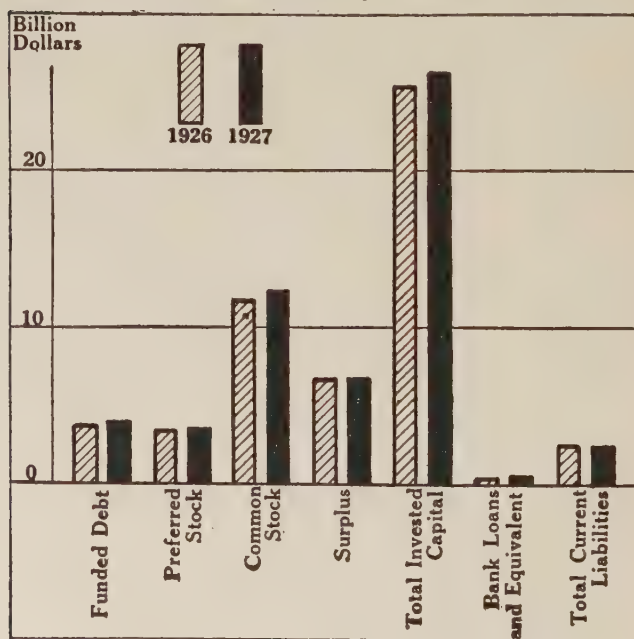
Seven companies increased the amount of their outstanding preferred by 10 millions or

more during the year, and this list included such substantial concerns as General Motors, which added 25 millions; National Lead, which added 10.3 millions; International Paper, which added 47.6 millions; and Victor Talking Machine, which had no preferred at the end of 1926 but had 32.3 millions at the end of 1927.

There is no evidence that preferred stock is becoming a less popular form of security issue.

Common Stock and Surplus.—These items, which to some extent represent actualities and to

Chief Liability Items



some extent merely bookkeeping operations, do not call for discussion at this time. We do, however, direct attention to what may appear as a discrepancy in the surplus account.

Our composite income account, as set forth in the preceding chapter, indicated that the earned surplus, or the amount available to be carried to surplus last year, amounted to some 475 million dollars. But in our composite balance sheet, the surplus account at the end of 1927 was only 129 millions greater than at the end of 1926. Even after adjusting the composite income account to allow for the exclusion of Standard Oil Company of New Jersey, the apparent discrepancy between the indicated income account addition to surplus and the balance sheet indicated addition still is a considerable one.

In the compilation of our composite balance sheet items, we excluded special reserves from surplus account wherever possible. This largely accounts for the fact that it fails to match the income account item in this particular. It is the custom of many corporations to make various debits and credits against the surplus account *after* they have computed earned surplus for a given year.

The surplus item in the balance sheet probably gives a truer picture of actual surplus earn-

ings in 1927 than does the similar item in the income account. The balance sheet gives further substantiation to the contention that the percentage of 1927 earnings credited to surplus last year was not necessarily dangerously low for that particular year, *but that it was much too small to be considered as a standard for a period of years.*

Net Working Capital.—Net working capital is not a balance sheet item; it reports a computation, showing the results of an *analysis* of a balance sheet. It merely expresses the relationship of current assets to current liabilities in another way: it is obtained by subtracting current liabilities from current assets. Net working capital is the sum that would remain, as represented chiefly in cash, receivables, and inventories, if all current liabilities were discharged.

This item showed a rather narrow margin of increase. But the large excess of current assets over current liabilities clearly suggests that net working capital, even though it expanded only slightly in 1927, is quite adequate for industry's current needs.

Book Value and Market Value of Common Stock

For present purposes, we have been content to compute book, or equity, value of common

stock merely by obtaining the sum of the stated balance sheet value of the common and surplus. Frankly, this is a short cut to an approximate truth. There are numerous methods, infinitely more intricate, which give a finer calculation so far as individual corporations are concerned. But tests have revealed that for purposes of aggregate studies the simple operation which we have utilized gives a result almost as satisfactory as though the precise value had been laboriously computed for each of the corporations on our list.

It is something of a revelation to learn that, in a bull period, book value bears such a *distant* relationship to market value. Thus at the end of 1926, the aggregate market value of the common stocks of the 524 concerns which it was possible to utilize in this section of the study was 6.8 billions greater than indicated book value. At the end of 1927, market value was 12.9 billions greater. As of August 1, 1928, market value was 16 billions greater than indicated book value at the close of the previous year. Expressed in percentage terms, these comparisons run as follows:

Market value at the close of 1926 was 137 per cent of indicated book value at that time;

Market value at the close of 1927 was 169 per cent of indicated book value at that time;

Current market value (August 1, 1928) was some 185 per cent of indicated book value at the close of last year.

Market Outstrips Equities.—It is the change in percentage relationships, over a period of just about a year and a half, which is of especial significance.

Often one is assured that the security purchaser buys not assets, but earning power. Quite true; but equally difficult to justify on the basis of present facts, inasmuch as industrial earnings *declined* materially in 1927.

If they do nothing more, the data presented in this and in the preceding chapter give indisputable statistical proof to the contention that the great advance in stock prices in 1927 and 1928 was not predicated upon either a big improvement in corporate earning power or a substantial enhancement of stockholders' equities.

To some extent the market value advance may have been based upon an increasing *realization* of the true worth of these book and earning assets. But this factor must have been a relatively unimportant one; people do not automatically attain wisdom merely because they have torn another leaf off the calendar. *More and more it becomes convincingly clear that the great 1927-1928 bull movement in common stock prices was not based primarily upon the corporate developments which had been occurring*

during that period; to a preponderant extent it was based upon conditions peculiar to the stock market itself, rather than to industry. One summarizes this preponderant stock market influence with two short words: cheap money.

Cheap Money—Dearer Equities.—The abundance and the cheapness of credit, and the willingness of our banking system to keep expanding credit, made it possible for security buyers to pay higher prices for their corporate equities than they were accustomed to pay in former years.

And this simple statement of fact contains no criticism, rebuke, or warning. It is fully as safe to assume that equities and earning power were undervalued at the beginning of 1927 as it is to assume that they were overvalued in the autumn of 1928. It is chiefly the ability to obtain credit to carry these equities that determines the degree to which they will be capitalized in the stock market.

Thus, obviously, a substantial reduction in the MARKET'S valuation of equities could, at some time in the future, come about simultaneously with a further increase in the actual equities themselves—merely because credit conditions would make it impossible to continue the higher valuation.

Explanation and Definitions of Terms

Property account—Physical property, such as plants, equipment, land, etc., but not including investments except in the cases of holding companies.

Cash and equivalent—Including marketable securities, demand notes, call loans, etc.

Accounts receivable, inventory, total current assets, and total current liabilities, funded debt, preferred stock, common stock, and surplus are the usual items so named, and need no explanation.

Total invested capital—Surplus plus the par or stated balance sheet value of funded debt, preferred stock, and common or capital stock.

Net working capital—Total current assets minus total current liabilities.

Book (or equity) value of common stock—Taken as the sum of surplus and the par or stated balance value of common stock.

Market value of common stock—The closing market price of each individual issue on the date named, multiplied by the number of shares outstanding.

CHAPTER IV

DEPRECIATION AND DEPLETION

THE most interesting fact about the depreciation policy of American industry is that there is none.

Leastwise, a careful study of the income accounts and balance sheets of more than 500 concerns fails to reveal anything even remotely suggesting a unified policy. Doubtless thousands of individual policies are in operation, each subject to change without notice from one year to another and the majority of them actually undergoing such changes. But evidence of a common viewpoint on the part of the management of industry, or of a common conception, is wholly lacking.

This fact in itself, serious as it is from the standpoint of sound accounting and financial practice, would be less subject to criticism if the individual policies of every important concern, which has securities outstanding in the hands of the public, were a matter of common knowledge.

But the majority of corporations make public no data whatsoever to inform their security

holders as to the amount of profit that is appropriated for depreciation charges and reserves each year. It will be recalled that 545 industrial concerns are being studied in this analysis. For only 219 of these, or, say, 2 out of every 5, has it been possible to obtain data revealing the sums that were charged to depreciation and depletion in the years 1926 and 1927.

Composite depreciation and depletion accounts for these 219 concerns reveal many interesting and useful facts and provide the basis for some arresting conclusions. But it is none the less striking that such data are obtainable only for the minority, rather than the majority, of important concerns.

Methods of Omission.—The most common method of omission is merely to issue an annual statement reporting income *after* depreciation or depletion. There is nothing whatsoever deceptive about this. The corporation simply declines to reveal to its security holders any facts relative to its charges for depreciation or depletion, and frankly says so, in as many words, in its annual statement. That disposes of the matter neatly, and apparently to the satisfaction of *most* of the security holders who examine the statement.

Under such a method of reporting financial results for a given year, allowances for depre-

ciation on, say, a 20 million dollar property, might be one dollar or 5 million dollars. There is absolutely no means by which the facts can be determined.

But in cases of this kind the security owner at least has the assurance that *some* allowance has been made for renewal and improvement of his property.

However, not all security owners have even that satisfaction. The reports of some concerns make no mention of depreciation. So far as the public record reveals, *no* depreciation charge is made. In most cases of this sort, this is perhaps an unwarranted assumption. But in a relatively few cases there are ample grounds for the suspicion that no depreciation charges are being made.

There is a countless number of other forms of variation in the reports of those concerns which do not make public an exact figure relative to depreciation charges. Some corporations, in their published statements, report operating expenses and depreciation as a single item; others lump depreciation and taxes; others combine depreciation and fixed charges.

One concern in the textile industry, in its 1927 statement, naïvely carried an entry which it named "Depreciation on appreciation on machinery and equipment." Some time previously

it had written up the asset value of its equipment, and is now engaged, apparently, in the task of writing this equipment down again.

Practices in the Extractive Lines.—Reports of corporations operating in the extractive industries are correspondingly at variance. A minority goes the full way, and properly reports depreciation and depletion as separate items. Others lump the two; others report depreciation but not depletion, or vice versa. In numerous cases it is impossible to determine whether *any* allowance has been made for the missing item.

Many concerns operating in the extractive industries are in contest with the government tax authorities as to the amounts that they may properly charge to depletion reserve. So far as the public is concerned, they cut the Gordian knot by omitting the depletion item entirely from their statements, although some state that "depletion has been computed on the books of the company, but omitted from this published statement."

As is the case with industrial concerns of other types, the majority of corporations which are exhausting their resources by extractive processes make a long story short by reporting income "after depreciation and depletion."

It is needless further to multiply examples. The foregoing constitutes ample basis for the

statement that there is a total lack of consistency in the reporting of depreciation or depletion charges, and subsequent evidence will substantiate the statement that there is a corresponding lack of consistency in the amounts which various corporations allow for depreciation.

An Income Account Item.—Quite properly it may here be asked: Well, what of it? It is the profit of an industrial concern which tells the story that the security owner wants to know, it may be argued; if this profit is adequate, what difference does it make whether the assigned value of a given company's property, on its balance sheet, is 5 million dollars or 10 million? What difference does it make whether the book-keeping revision in property valuation is at the rate of 2 per cent or 20 per cent per year?

If depreciation were only a balance sheet item, neither its rate nor its amount would be of great importance, for current purposes, to the security owner. It would be of importance over the long term, obviously, but of only passing importance for the short term.

Our interest here lies chiefly in the significance of the depreciation charge as *an income account item*. Net earnings either for funded debt or for common or preferred stocks are figured *after* depreciation. It is the essence of

corporation statement analysis, therefore, not only to know the actual sum that has been charged to depreciation, but to know what a given company's policies are in this respect and to have some standards by which such policies may be tested and judged.

We can make the point clearer by a concrete example. Later in this chapter, it will be observed that we have computed a figure which reports the average percentage of property value charged to depreciation by a representative list of industrial concerns in 1927. We have tested the policies of a number of individual concerns against this average. It will be sufficient for the moment to look only at extremes.

Depreciation charges of Corporation A (an actual corporation) in 1927 amounted to 17.7 per cent of property value. This was far above the average. The company's reported earnings available for its common stock amounted to around \$7.60 per share. *Had Corporation A's depreciation charges in 1927 been only equal to the average for our representative group of reporting concerns, the earnings shown for its common stock would have been well in excess of \$9 per share.*

At the other extreme is Corporation B, the 1927 depreciation charges of which amounted to less than one-half of one per cent of property

value. This concern showed better than \$5.25 per share of common stock. *If its depreciation charges had been equal to the average, it would have reported a DEFICIT for its common stock for that year.*

Essential to Analytical Study.—In one sense, it is ridiculous to formulate a security market judgment based upon an earnings statement unless it is known how earnings are computed. A concealed depreciation account gives a world of latitude. An open statement of fact, even though it discloses a policy which vividly deviates from the average, at least provides the basis for analysis.

Inadequate reserves for depreciation over a period of years assuredly mean that, when the time for large scale renewals does arrive, it will be necessary to bring new capital into the business, thus diluting common stockholders' equities.

Abnormally large reserves for depreciation mean the issuance of an income account which is deceptive unless it is very carefully analyzed and compared.

But it is our judgment that, on the average, the stockholder who receives each year a frank statement of depreciation policy is better off, in the long run, than is the stockholder who gets

no statement whatsoever on this point—better off regardless of what his corporation's particular policy may be.

Concealed assets or overvalued assets, concealed earning power or overstated earning power, do not ordinarily accrue to the benefit of the average stockholder; they accrue to the benefit of those relatively few persons who have knowledge of the concealment and who, either consciously or unconsciously, profit at the expense of those who are without this knowledge.

Depreciation and Depletion Charges in Extractive Industries

An extractive industry, such as coal, copper, lead, iron, oil, sulphur, etc., not only wears out its physical equipment—buildings, machinery, tools, etc.—over a period of years, but it dissipates its capital assets. Minerals taken from the deposits that it owns can never be renewed. Therefore, such concerns customarily compute two reserve accounts against their operations—one for depreciation and one for depletion.

It is both customary and proper for companies in the extractive industries to pay a portion of common dividends out of the depletion account. Under certain circumstances—especially where the calculated life of a mining prop-

erty is short and where physical equipment would become virtually worthless coincident with the exhaustion of mineral reserves—it might be proper to pay a portion of dividends out of the depreciation account.

Except in the case of prospective liquidation, payment of dividends from the depreciation account by a nonextractive industrial concern can seldom be justified. When dividends are so paid, they are, more often than not, referred to as “liquidating dividends.”

Only 61 Complete Reports.—In the long list of concerns operating in the extractive industries which have been studied, only 61 render their annual statements in such a form that it has been found possible to obtain exact figures showing the amounts charged to depreciation and depletion in 1926 and 1927. By no means all of these 61 separate the two items. But in each case it has been possible to obtain a combined figure representing the sums charged to the two items together.

Depreciation and depletion charges bear a closer relationship to property account and to income than to any other items in the balance sheet and income account. For the present, attention will be devoted solely to the relationship between depreciation and depletion charges and

property value. The relation to income will be analyzed later. The following table reports aggregate property values, aggregate depreciation and depletion charges, and the percentage of property value represented by depreciation charges each year:

TABLE 5

61 Concerns in Extractive Industries

—Million Dollars—			
	Property Valuation	Dept. and Depl. Chgs.	Per Cent of Property
1926	\$5,283.64	\$248.92	4.71
1927	5,350.06	261.39	4.89

Examination of the accounts of the concerns which reported depreciation and depletion separately indicated that about one-fourth of the combined charge is for depletion, while the other three-fourths is for depreciation. Due to the small number of companies upon which these observations are based, these fractions should be regarded as merely suggestive, rather than as trustworthy criteria.

Depreciation Charges in Nonextractive Industries

Depreciation data for leading corporations in nonextractive industries proved to be somewhat more adequate. It was possible to compile a composite statement for 158 such concerns, viz.:

TABLE 6

158 Concerns in Nonextractive Industries

	—Million Dollars—		
	Property Valuation	Deprec. Charges	Per Cent of Property
1926	\$3,748.70	\$165.95	4.43
1927	3,951.10	222.39	5.63

This table, compared with the corresponding one for extractive concerns, presents certain questions to which we are frank to state we are unable to give a conclusive answer:

(1) Why did the depreciation and depletion charges of identical concerns in the extractive industries increase by only about 5 per cent in 1927, as compared with 1926, while depreciation charges alone of nonextractive concerns increased by almost 34 per cent? (2) Why should the depreciation charges of nonextractive concerns (which are not exhausting their capital assets) have been relatively larger in 1927 than combined depreciation and depletion charges of concerns which are exhausting their assets? (3) Were such charges too low in the cases of the average extractive concern, or too high in the cases of the average nonextractive concern?

These queries, obviously, are posers. Perhaps nonextractive industry, which is for the most part manufacturing industry, assumes that in this era of new invention its equipment becomes obsolete more rapidly than does the equipment of the extractive industries. But it would be hard to justify such an assumption. Some of the most revolutionary inventions of recent years

have been in mining, loading, and mineral-treating devices.

A guess somewhat nearer the truth might be the conjecture that, 1927 being a year of acute depression in the oil and coal industries, and of mild depression of several other of the extractive industries, the group, as a whole, cut its depreciation and depletion cloth to fit the measure of its profits.

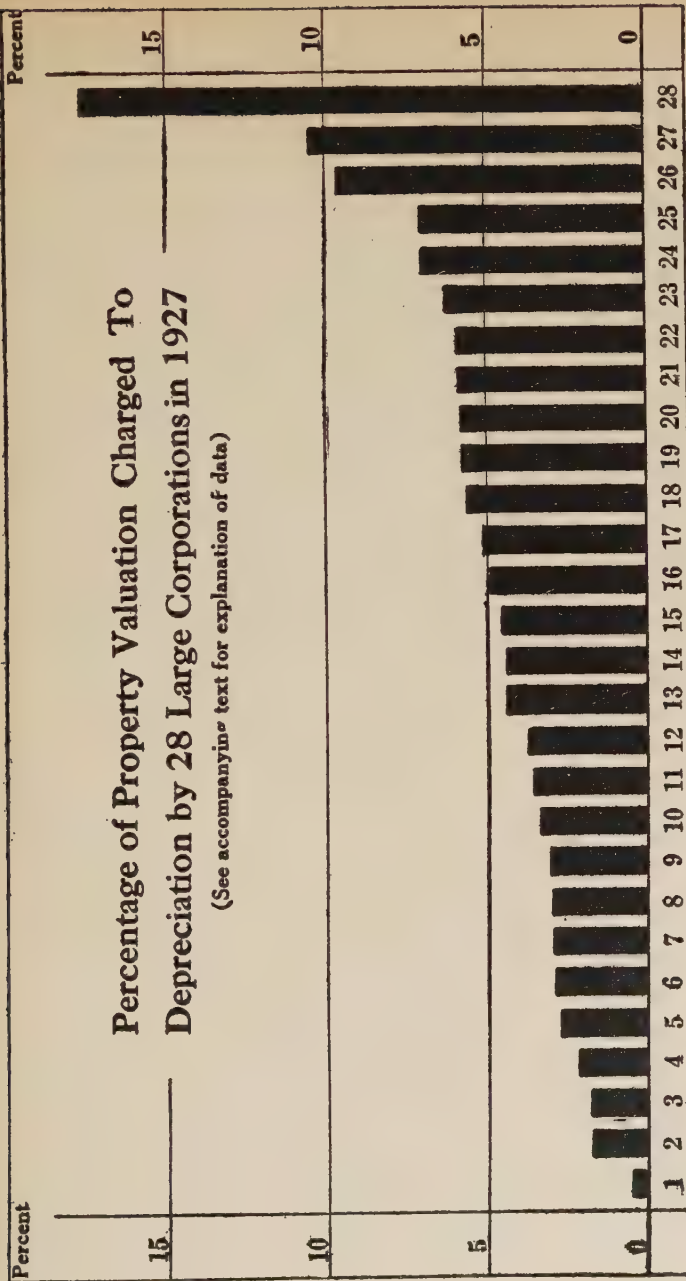
In any event, it is illuminating to note the diverging trends. *It is still more illuminating to note that, on the average, 158 leading concerns in nonextractive industries last year charged up depreciation reserves equivalent to, say, 5 2/3 per cent of property value.*

Individual Deviations.—An average, of course, is nothing more than a conglomerate of individual observations. Special study, therefore, has been given to the depreciation policies of certain individual concerns, in an effort to determine to what extent radical deviations from the average 1927 depreciation figure could be taken as an indication of an unsatisfactory financial situation.

The concerns chosen for study in this connection were the largest reporting ones in each non-extractive industry that was studied. There were 28 such lines of industry. The amounts charged to depreciation in 1927 by these 28

Percentage of Property Valuation Charged To Depreciation by 28 Large Corporations in 1927

(See accompanying text for explanation of data)



The names of the corporations included, being not pertinent to the case, are omitted; they are designated merely by the numbers at the bottom of the chart.

largest reporting concerns varied between 0.48 and 17.7 per cent of property value. (See accompanying chart.)

Eight concerns charged less than 3 per cent of property value to depreciation. Six of these 8 were in an obviously weak financial condition, and their 1927 earnings were generally unsatisfactory. Four of the 8 were paying no dividends on their common stocks. The two exceptions in the group were American Can and American Radiator, both of which reported satisfactory earnings and were in a strong financial position.

Fourteen concerns charged between 3 and 6 per cent of property value to depreciation. All but 3 were in a good financial position and reported satisfactory earnings; all but two paid dividends on their common stocks.

Six concerns charged more than 6 per cent of property value to depreciation; all but 1 were in strong financial and earnings positions; all but 1 were on a dividend basis.

Additional studies confirm the obvious conclusion deducible from these sample data. *That conclusion is that in the majority of cases the corporations which allow MATERIALLY less than say 5 2/3 per cent of property valuation for depreciation in a period of general business prosperity are subject to suspicion of weakness. There will be numerous exceptions which can be explained or justified on perfectly valid grounds. But in a broad way, tests based on this principle*

should prove quite helpful in income account analysis.

Relation to Depreciation and Depletion to Income

The following table traces the relationship between income and the sum that was charged to depreciation, or to depreciation and depletion in the case of corporations in extractive industries in 1926 and 1927. The income figures utilized, of course, report net profit *before* depreciation or depreciation and depletion.

TABLE 7

Per Cent of Income Charged to Depreciation and Depletion

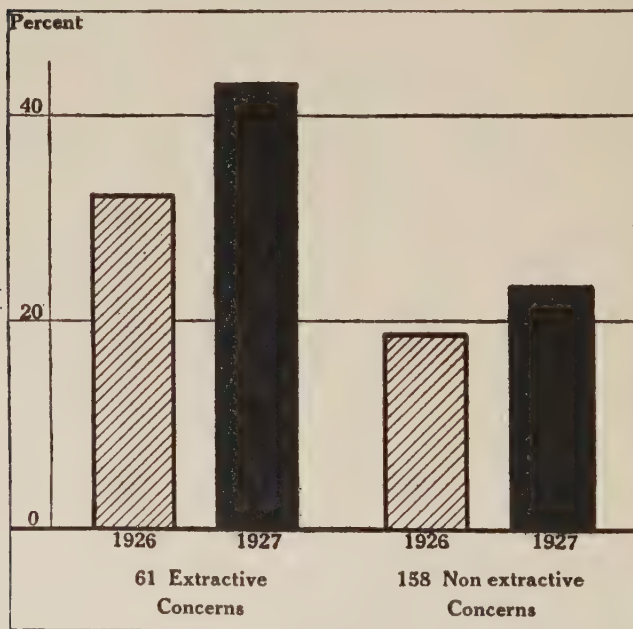
	61 Extractive Concerns	158 Non- extract. Concerns
1926	32.2%	18.7%
1927	42.8%	23.2%

The ratios for the extractive concerns run appreciably higher than the ratios for concerns in other lines because of the fundamental nature of the former's operations. And the ratios for both groups increased measurably in 1927 as compared with 1926 because income in the first-named year slumped off decidedly.

Above everything else this table emphasizes the importance of the depreciation charge in the income account. An item which amounted to

more than $2/5$ of the income of extractive concerns last year, and to nearly $1/4$ of the income of nonextractive concerns, can assuredly not be passed over lightly. Not only is more information relative to depreciation policies needed, but more consistency and greater standardization of financial policies is clearly called for.

**Relation of Depreciation and Depletion Charges
to Income**



The chart shows the percentage of net profit before depreciation and depletion charged to these items during the past two years.

Long-Term Variation.—Not as between one typical year and another, but over a period of years, depreciation charges vary with income.

In years of depression considerably smaller amounts will be charged to depreciation than in years of prosperity. In other words, the *expediency* of depreciation policies is fully as important, at certain times, as is the scientific computation of such charges at other times.

This premise can be demonstrated statistically. For a selected list of 27 concerns operating in the extractive industries, and 35 concerns in the nonextractive industries, depreciation charges have been traced back through 1921. It is unnecessary to detail the record for every year. So for current comparative purposes, data are presented only for 1921, which was a year of acute industrial depression; 1923, which was a year of vigorous recovery, and 1926 and 1927, which were indisputably years of general business prosperity, despite the decline in profits which occurred in 1927.

The statistical device which most clearly sets forth the trend is the relative. In each column of figures following, the average of the four selected years has been taken as equal to 100, and all data have been converted to relatives, in terms of this base.

TABLE 8

Depreciation Charges and Profits of 35 Concerns in Nonextractive Industries

(In relative, 1921-23-26-27 average equals 100)

	% of Property Value Charged to Deprec.	Net Profit Before Depreciation
1921	76	Deficit
1923	94	103
1926	90	141
1927	140	163

Depreciation and Depletion Charges and Profits of 27 Concerns in Extractive Industries

(In relative, 1921-23-26-27 average equals 100)

	% of Property Value Charged to Depr. & Depl.	Net Profit Bef. Depr. & Depl.
1921	78	48
1923	97	106
1926	112	139
1927	113	107

Note how much greater, relatively, were depreciation charges in the prosperous years 1926 and 1927 than in the depression year 1921. No one will contend that industrial property really depreciated more rapidly in 1926-1927 than in 1921; no one will contend that the need for renewals was greater in the later years than the earlier one.

It is chiefly a question of practicability. *On the average and over a period of time, what industry can AFFORD to charge to depreciation has an important bearing upon what is actually so charged.*

Opinion

The information relative to depreciation policies which becomes available to the security owners of American industry is wholly inadequate. Less than half of the industrial corporations, the securities of which have general distribution among the public, give illuminating information in this respect.

It is our opinion that security owners have a perfect right to these data—that any security owner should at any time be able to obtain from the corporation in which he is financially interested a complete record of depreciation charges over a period of time. Without such data his decision as to whether he should hold his securities, sell them, or buy more of them is to a certain extent predicated upon sheer guess.

We do not believe that the average corporation which withholds information relative to depreciation policies willfully seeks to practice deception. Omission of such data is more of a habit, a long-standing custom, than a precalculated attempt at confusion. And probably the chief reason why depreciation information has been withheld so frequently lies in the fact that security owners, failing to appreciate its importance, have themselves made scant demand for it.

Taken as a group, the owners of American industrial securities have in the past constituted for the most part an inert mass, having neither the inclination nor the organization to effect many important changes in their aggregate situation. They form committees and retain lawyers when interest payments on their bonds lapse, sometimes also when their preferred dividends lapse, and sometimes again when some particularly flagrant violation of trust appears to be endangering the values of their commitments.

But most of the important changes which work to their long-term benefit are achieved *for* them, rather than *by* them. In this respect the record of the New York Stock Exchange is one of which its members may be justly proud. The Exchange demands that the corporations which have their shares listed render official income accounts and balance sheets at least annually, and it is doing everything within its power, apparently, to encourage quarterly reports.

It is only one step farther for the Stock Exchange to require *complete* reports from those in whose securities it deals. A complete report, beyond any question whatsoever, is one which not only includes the depreciation item, but one which also includes data showing gross income

(this latter named item will be dealt with in the next chapter).

The adoption of at least something approaching standardized practices, policies, and conceptions relative to the depreciation account is, for the time being at least, industry's problem rather than security owners'. Some progress along this line has already been made. That much still remains to be done is, we feel, demonstrated by the data included in the foregoing analysis.

CHAPTER V

THE PERCENTAGE OF GROSS INCOME SAVED FOR NET PROFIT

A—STUDY OF CORPORATIONS WHICH SAVED THE LARGEST PORTION OF GROSS FOR NET

OF THE 545 leading industrial corporations under study, it has been found possible to compare the gross incomes and net profits of 235, or 43 per cent of the total. Comparison was impossible in the other cases because gross income was not stated in the published income accounts.

In the aggregate, the 235 corporations for which comparison was possible saved 9.75 per cent of gross income for net profit in 1926, and 9.12 per cent in 1927.

The complete list showing the percentage of gross saved for net by each of these companies constitutes such an unusual and significant exhibit that it is set forth in its entirety herewith. The later sections of this chapter will be devoted to study of these data.

Explanations and Qualifications.—The figures taken as net profit in each case are, of course, those reporting such profits *before* fixed charges.

TABLE 9

**Per Cent of Gross Saved for Net, 1926-1927, by 235
Leading Industrials**

(Arranged in order from highest to lowest percentages,
on basis of 1927 results.)

COMPANY	% of Gross Saved for Net	
	1926	1927
Hecla Mining Co.....	41.10	41.70
Nat'l Supply Co. of Del.....	43.20	33.70
Bush Terminal Co.....	30.80	32.50
New York Dock Co.....	32.60	32.50
Consolidated Mining & Smelt. Co., Ltd..	31.70	32.20
Telaugraph Corp.	27.10	31.60
Patino Mines & Enterprises Consol., Inc.	31.20	30.50
Central Aguirre Sugar Co.....	17.20	30.40
Fleischmann Co.	28.90	30.00
American Arch Co.....	30.60	29.90
Coca-Cola Co.	27.90	28.20
International Business Machines Corp...	24.00	27.90
Houston Oil Co. of Texas.....	34.50	25.40
Canada Dry Ginger Ale, Inc.....	20.70	24.20
Maytag Co.	23.40	23.60
Columbian Carbon Co.....	33.30	22.70
Caterpillar Tractor Co.....	20.80	22.20
Wright Aeronautical Corp.....	20.60	22.00
Independent Oil & Gas Co.....	33.20	21.90
Barnsdall Corp.	25.40	20.80
Amerada Corp.	32.90	20.70
South Porto Rico Sugar Co.....	15.00	20.70
Amer. Mach. & Foundry Co.....	13.40	20.60
Homestake Mining Co.....	9.46	20.60
Postum Co., Inc.....	24.10	19.90
Curtiss Aeroplane & Motor Co., Inc.....	10.80	19.70
International Cement Corp.....	20.00	19.00
General Motors Corp.....	17.50	18.60
Gen'l Amer. Tank Car Corp.....	14.10	18.10

CORPORATION PROFITS

TABLE 9 CONTINUED

COMPANY	% of Gross Saved for Net	
	1926	1927
Western Dairy Products.....	14.20	17.90
Air Reduction Co., Inc.....	17.80	17.80
Cerro de Pasco Copper Corp.....	16.40	16.80
International Paper Co.....	10.50	16.20
Packard Motor Car Co.....	20.20	16.10
Congress Cigar Co., Inc.....	11.90	15.80
Manati Sugar Co.....	9.49	15.80
St. Regis Paper Co.....	12.80	15.50
American Ice Co.....	16.60	15.40
Electric Auto-Lite Co.....	15.60	15.30
Lehigh Coal & Navigation Co.....	20.40	15.20
Kresge (S. S.) Co.....	10.70	15.10
Naumkeag Steam Cotton Co.....	4.63	15.10
Fajardo Sugar Co. of Porto Rico.....	11.30	15.00
General Electric Co.....	13.00	15.00
Madison Square Garden Corp.....	17.40	15.00
Nat'l Cash Register Co.....	14.70	15.00
Phillips Petroleum Co.....	42.40	15.00
Victor Talking Mach. Co.....	16.80	15.00
Zenith Radio Corp.....	5.46	14.90
Eureka Vacuum Cleaner Co.....	15.60	14.20
International Shoe Co.....	11.40	14.20
Texas Corp.	21.70	14.20
Union Oil Co. of California.....	16.30	13.90
Guantanamo Sugar Co.....	8.79	13.80
Seagrave Corp.	15.00	13.80
Standard Commercial Tobacco Co., Inc..	10.10	13.60
Celotex Co.	18.30	13.40
Cuba Cane Sugar Corp.....	4.75	13.40
Shattuck (Frank G.) Co.....	11.10	13.30
Atlas Powder Co.....	14.10	12.90
Cuban-Dominican Sugar Corp.....	0.00	12.70
General Ice Cream Corp.....	10.70	12.50
Loew's, Inc.	14.80	12.50

TABLE 9 CONTINUED

COMPANY	% of Gross Saved for Net	
	1926	1927
Woolworth (F. W.) Co.	10.90	12.50
Byers (A. M.) Co.	14.60	12.40
Alpha Portland Cement Co.	15.10	12.30
Richfield Oil Co. of Calif.	10.40	12.20
American Type Founders Co.	13.40	12.10
Purity Bakeries Corp.	9.89	12.10
Consolidated Laundries Corp.	13.30	11.90
Punta Alegre Sugar Co.	10.60	11.90
American Seating Co.	13.60	11.80
Hercules Powder Co.	12.10	11.50
MacAndrews & Forbes Co.	13.60	11.50
Colo. Fuel & Iron Co.	12.60	11.10
American Cyanamid Co.	11.40	11.00
Bigelow-Hartford Carpet Co.	7.96	11.00
Ludlum Steel Co.	10.40	11.00
Thatcher Mfg. Co.	11.20	11.00
Mack Trucks, Inc.	13.10	10.90
Allis-Chalmers Mfg. Co.	11.50	10.80
Cluett, Peabody & Co., Inc.	7.48	10.80
Thompson (John R.) Co.	10.40	10.70
Amer. Rolling Mill Co.	12.60	10.60
Standard Sanitary Mfg. Co.	10.30	10.60
Warren Bros. Co.	10.90	10.60
Goodrich (B. F.) Co.	5.40	10.30
Goodyear Tire & Rubber Co.	7.10	10.30
Standard Textile Products Co.	4.83	10.30
International Silver Co.	8.32	10.20
Skelly Oil Co.	24.50	10.20
Bethlehem Steel Corp.	10.70	9.94
Art Metal Construct. Co., Inc.	11.30	9.89
Beech-Nut Packing Co.	9.10	9.65
Westinghouse E. & M. Co.	9.76	9.60
Shell Union Oil Corp.	21.30	9.50

TABLE 9 CONTINUED

COMPANY	% of Gross Saved for Net	
	1926	1927
Johns-Manville Corp.	8.39	9.28
United Cigar Stores Co. of America.	9.05	9.18
Sears, Roebuck & Co.	8.49	9.01
Radio Corp. of America.	7.98	9.00
Republic Iron & Steel Co.	11.50	8.99
Studebaker Corp.	9.19	8.89
Baldwin Locomo. Wks.	13.60	8.85
Kress (S. H.) & Co.	9.00	8.77
U. S. Industrial Alcohol Co.	4.33	8.76
Munsingwear, Inc.	9.50	8.72
Cuban-Amer. Sug. Co.	6.92	8.63
Glidden Co.	9.35	8.63
Jewel Tea Co., Inc.	8.51	8.56
Spear & Co.	6.99	8.50
Lion Oil Refining Co.	14.60	8.46
Nat'l Dairy Products Corp.	8.60	8.35
McCrory Stores Corp.	8.48	8.34
Remington Arms Co., Inc.	7.52	8.16
Fageol Motors Co. (Calif.)	2.97	8.02
General Asphalt Co.	11.50	7.99
U. S. Steel Corp.	8.89	7.96
Bamberger (L.) & Co.	8.55	7.95
Sinclair Consol. Oil Corp.	13.20	7.92
Drug, Inc.	8.75	7.88
Sherwin-Williams Co.	7.38	7.88
Best & Co.	7.77	7.82
Procter & Gamble Co.	6.47	7.82
Gulf States Steel Co.	8.34	7.81
Dodge Bros., Inc.	9.98	7.68
C. G. Spring & Bumper Co.	11.70	7.67
Melville Shoe Corp.	6.80	7.66
Macy (R. H.) & Co., Inc.	6.96	7.58
Reo Motor Car Co.	6.49	7.56

PERCENTAGE OF GROSS INCOME

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TABLE 9 CONTINUED

COMPANY	% of Gross Saved for Net	
	1926	1927
Oppenheim, Coll. & Co., Inc.....	7.05	7.44
Mengel Co.	6.96	7.16
Gulf Oil Corp. of Pa.....	15.20	7.05
Indian Motorcycle Co.	5.20	7.05
Montgomery Ward & Co., Inc.....	4.79	7.03
Waldorf System, Inc.	7.89	6.91
Devoe & Reynolds Co., Inc.....	7.80	6.84
U. S. Dairy Products Corp.....	6.82	6.73
White Eagle Oil & Refg. Co.....	10.20	6.72
Hires (Chas. E.) Co.	8.14	6.67
Kinney (G. R.) Co., Inc.....	4.99	6.62
Associated Oil Co.	11.50	6.52
F. & W. Grand 5-10-25 Cent Stores, Inc..	6.31	6.51
Butterick Co.	3.25	6.36
United States Rubber Co.....	9.13	6.35
Pan-Amer. Western Petroleum Co.	8.39	6.31
May Dept. Stores Co.....	6.88	6.30
Childs Co.	7.31	6.27
Real Silk Hosiery Mills, Inc.....	8.89	6.26
American Stores Co.	6.30	6.17
Atlantic, Gulf & W. Indies S. S. Lines...	5.04	6.12
National Acme Co.	5.61	6.10
Hupp Motor Car Corp.....	6.88	5.98
Endicott-Johnson Corp.	5.24	5.92
Amer. Bosch Magneto Corp.....	5.60	5.89
Penney (J. C.) Co.....	7.66	5.87
Pure Oil Co.	8.23	5.87
Tenn. Copper & Chem. Corp.....	11.90	5.87
Nat'l Distillers Prod. Corp.....	2.36	5.73
Peoples Drug Stores, Inc.....	6.66	5.69
Fair (The)	6.19	5.68
Vulcan Detinning Co.	8.99	5.64
Brown Shoe Co., Inc.	4.14	5.62

CORPORATION PROFITS

TABLE 9 CONTINUED

COMPANY	% of Gross Saved for Net	
	1926	1927
Emporium-Capwell Corp.	7.21	5.60
Nashawena Mills d	0.32	5.56
Universal Pictures Co., Inc.....	7.05	5.48
Southern Dairies, Inc.	8.90	5.47
Metropol. Chain Stores, Inc.....	4.81	5.46
Loft, Inc.	1.87	5.45
Pacific Mills	0.49	5.40
Borden Co.	5.46	5.38
Grant (W. T.) Co.	5.91	5.33
Arnold Constable Corp.	3.19	5.29
American Wholesale Corp.	3.91	5.20
Phillips-Jones Corp.	4.89	5.14
Consolidation Coal Co.	8.89	5.00
Elk Horn Coal Corp., Inc.	16.40	5.00
Tide Water Oil Co.....	8.40	4.94
Intern'l Mercan. Marine Co.	0.01	4.88
Pillsbury Flour Mills, Inc.....	3.07	4.64
Walworth Co.	4.59	4.48
Kelsey-Hayes Wheel Corp.....	4.53	4.42
Stutz Motor Car Co. of Amer., Inc.....	4.27	4.10
Calumet & Hecla Consol. Copper Co....	10.20	4.07
Electric Boat Co.	10.00	3.96
Sweets Co. of Amer., Inc.....	3.12	3.82
Worthington Pump & Mach'y Corp....	2.16	3.63
National Tea Co.	2.96	3.49
Washburn Crosby Co.	1.78	3.33
Bloomington Bros., Inc.....	5.18	3.30
National Dept. Stores, Inc.....	3.44	3.04
U. S. Distributing Corp.	3.43	3.01
Kroger Grocery & Baking Co.....	2.81	2.70
Pender (David) Grocery Co.	2.70	2.54
Simms Petroleum Co.	18.30	2.47
Kraft-Phenix Cheese Co.	2.26	2.45

PERCENTAGE OF GROSS INCOME

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TABLE 9 CONTINUED

COMPANY	% of Gross Saved for Net	
	1926	1927
National Enameling & Stamping Co., Inc.	2.51	2.34
Atlantic Refining Co.	4.97	2.34
Amer.-Hawaiian S. S. Co.....d	7.92	2.31
Century Ribbon Mills, Inc. d	3.91	1.89
Cudahy Packing Co.	2.56	1.82
Commercial Credit Co.	1.28	1.71
Commercial Invst. Tr. Corp.	1.73	1.63
Federated Metals Corp.	0.00	1.61
Gimbel Bros., Inc.	2.74	1.21
Arlington Mills	0.33	1.16
National Bellas Hess Co., Inc.....	0.79	0.90
Texas Pacific Coal & Oil Co.....	18.40	0.86
Panhandle Producing & Refining Co.....d	1.92	0.82
American Ry. Express Co.	0.78	0.76
Transue & Williams Steel Forging Corp..d	4.85	0.40
Martin-Parry Corp.	9.58	0.24
Superior Steel Corp.	6.15	d 1.04
Gardner Motor Co., Inc.	0.42	d 2.55
Williams Oil-O-Matic Heating Corp. ...	22.60	d 2.59
Pittsburgh Coal Co. d	3.76	d 2.68
Atlas Tack Corp.	0.50	d 2.73
White Motor Co.	3.35	d 2.73
Lima Locomotive Wks., Inc.....	9.41	d 2.92
Yellow Truck & Coach Mfg. Co.....	2.56	d 3.27
Kresge Dept. Stores, Inc.....d	3.73	d 3.47
Peerless Motor Car Corp.....	4.75	d 5.16
Phila. & Reading Coal & Iron Corp.....	2.65	d 6.73
Ipswich Mills	4.13	d 6.77
Consol. Distributors, Inc.	3.98	d 8.00
Granby Consolidated Mining, Smelting & Pwr. Co., Ltd. d	3.17	d 8.38
United Verde Exten. Mng. Co.....	3.77	d 8.65
Pathé Exchange, Inc.	5.89	d10.10

CORPORATION PROFITS

TABLE 9 CONTINUED

COMPANY	% of Gross Saved for Net	
	1926	1927
Marland Oil Co.	13.60	d11.00
Ajax Rubber Co., Inc.	d 0.14	d11.30
Hamilton Woolen Co.	d 1.40	d12.60
Pittsburgh Term'l Coal Corp.....	5.32	d14.90
Penn. Coal & Coke Corp.....	0.30	d17.10
Submarine Boat Corp.	d 3.15	d17.30
Graham-Paige Motors Corp.	1.36	d19.40
Superior Oil Corp.	3.48	d22.90
Aggregate	9.75	9.12

d=Deficit.

In selecting concerns which were believed to be comparable on the basis of reported gross income, we have necessarily allowed ourselves a certain amount of latitude. Methods of reporting this item (when it is reported at all) are far from uniform. This point may be strikingly illustrated by the following tabulation which shows the first item on the official income account statements of each of the first 20 companies which were checked in this study:

Company No. 1—	Net sales.
No. 2—	Net income.
No. 3—	Gross revenue after manufacturing expense.
No. 4—	Operating income.
No. 5—	Operating profit.
No. 6—	Operating income.
No. 7—	Gross manufacturing profit.
No. 8—	Net sales.
No. 9—	Sales.

- No. 10—Gross profit.
- No. 11—Net income.
- No. 12—Net sales.
- No. 13—Gross sales.
- No. 14—Net profit.
- No. 15—Total income.
- No. 16—Net income before depreciation.
- No. 17—Net sales.
- No. 18—Net sales and other income.
- No. 19—Total income.
- No. 20—Gross revenue.

Here is variety enough to satisfy even the most restless mind. The terms "net sales," "gross sales," "sales," and "gross revenue" are often used interchangeably. But it cannot be assumed that they are *always* used interchangeably; in some lines of business and trade there is an especially wide difference in the values referred to as net sales and gross sales.

Therefore, it has been necessary somewhat critically to examine each item, in the case of every reporting corporation. Where there existed a strong doubt that the item reported was truly representative (or approximately representative) of gross income, the company concerned has been eliminated from the list. In other cases, where there existed a minor doubt as to the precise meaning of the reported item, choice as to inclusion or exclusion was made on what appeared to be a common-sense basis.

Naturally, the purpose has been to include as

many corporations as possible in the study, so that the results would be the more representative. And it goes without saying that these results, as is always true in studies based upon great volumes of data, are claimed to be only closely approximate, rather than precise down to the last penny.

The 50 Concerns Which Saved the Greatest Portion of Gross for Net in 1927

We shall now turn our attention to the extremes in the foregoing list, here considering the 50 concerns which stand at the top of the tabulation—*i.e.*, those which saved the greatest portion of gross income for net profit in 1927; in a later section we shall consider for the most part the group at the bottom of the list.

The central purpose is to determine *why* certain concerns stand at the top of our list and *why* certain others stand at the bottom; to see what bearing these reasons have upon the profits situation in various lines of business; then to draw whatever broad conclusions, applicable to business in general, may appear justified.

The 50 corporations at the top of the list may be grouped according to industrial lines as follows:

GROUP	No. of Cos. in Each
Agricultural Implements	1
Automobiles	2
Automobile Parts and Accessories	1
Building Equipment and Supplies.....	1
Chemicals (Industrial)	2
Coal	1
Copper	1
Cotton Goods	1
Electrical Equipment	1
Food Products	5
Household Equipment and Supplies	3
Lead and Zinc	1
Machinery and Machine Equipment	2
Miscellaneous Mining and Smelting	3
Miscellaneous Manufacturing	3
Miscellaneous Services	2
Office and Business Equipment and Supplies.....	3
Oil	5
Paper	2
Radio and Musical Instruments	2
Railroad Equipment	1
Retail Trade	1
Sugar	4
Theaters, Moving Pictures and Amusements.....	1
Tobacco Products	1

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(In all the following, the percentage figure immediately after the name of each concern merely repeats, for convenience, the calculations of the preceding table, reporting the portion of gross saved for net in 1927.)

Agricultural Implements—Caterpillar Tractor Co. (22.2%)—Classification of this concern as a

producer of agricultural implements is somewhat dubious. Its chief product is the tractor, about 20 per cent of total output being currently used for agricultural purposes. Some thresher combines are produced. Present plans call for expansion of the agricultural lines. If not actually now, then in the relatively near future, a greater portion of gross income will arise from the agricultural industry than from any other single line.

The company's gross has increased very rapidly during recent years, due to the swift expansion of demand for power-drawn machinery. The 30 per cent gain in gross which occurred in 1927 was no doubt partially due to the Ford Motor Company's temporary withdrawal from the tractor field. Caterpillar is dominant in its field on the Pacific Coast, enjoying there a situation which is in some respects monopolistic. Its margin of profit has customarily been wide for a number of years past. Probably the chief reason for this wide margin has been Caterpillar's dominating, quasi-monopolistic position in its principal territory.

Automobiles—General Motors Corporation (18.6%)—The *largest* automobile producer in the world. Wide diversification of product. Notably aggressive and intelligent management.

Packard Motor Car Co. (16.1%)—Is almost the antithesis of General Motors. Relatively, it is a small-scale producer; for every car sold by Packard in 1927, General Motors sold 40. Packard has little diversification; it concentrates upon a few high-priced lines of fine passenger cars, and has sedulously concentrated its efforts in this limited field for many years past. Like General Motors, its management is conspicuously excellent. A high-priced commodity such as Packard sells customarily yields a wider margin of profit than lower priced ones, for obvious reasons. Packard's earnings record is illustrative of the principle that it is possible for a given concern, even though it may be producing only for a relatively limited market, to win a wide margin of profit in its particular field if it is able to do its job superlatively well.

Automobile Parts and Accessories—Electric Auto-Lite (15.3%)—A leading producer in its field (starting and lighting equipment and ignition systems) which has recently been expanding its markets by the acquisition of concerns operating in closely adjoining fields. At the beginning of 1928 its equipment was standard on 25 makes of passenger cars, 42 makes of trucks, and 18 makes of speed boats. Has only one other *large scale* competitor (Delco-Remy, controlled by General Motors). It therefore shares

generously in a quasi-monopolistic situation; and the fact that it has created a fixed demand for its own particular product gives additional basis for a wide margin of profit.

Building Equipment and Supplies—International Cement (19.0%)—One of the *largest*—perhaps *the largest*—producers of cement in America. Further enjoys the advantage of modern equipment and of strategic and economical location of plants. Gross has been especially expanded during recent years by the booms in building, public works, and road construction. Wide profit margin is chiefly due to (a) dominant size; (b) fortunate location of plants.

Chemicals (Industrial)—Columbian Carbon Co. (22.7%)—The *largest* producer of carbon black, and controls the *largest* proved natural gas reserves in this country. Gas sales have tripled during past two years.

Air Reduction Co. (17.8%)—The *largest* producer of oxyacetylene welding and cutting apparatus, and probably also the *largest* single corporation engaged in reducing the atmosphere to its component parts. Source of raw material is unique, giving Air Reduction an advantage over other concerns which are continually struggling with changes in prices and changing volumes of supply in their raw materials.

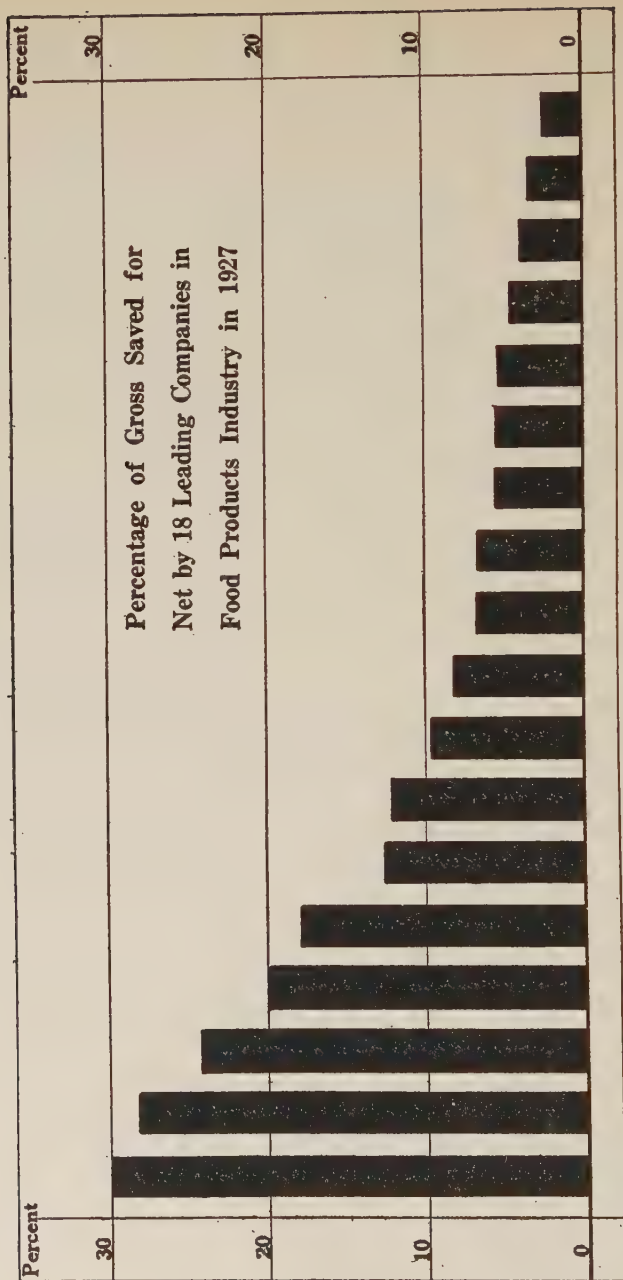
Coal—Lehigh Coal & Navigation Co. (15.2%)—

One of the *largest* producers of anthracite, but also has extensive interests in railroad, utility, canal, and other similar properties. These other properties gave the bulk of 1927 net revenue. Lehigh showed a wide margin of profit on aggregate operations last year, not because it was primarily a coal producer, but because it was a coal producer which had had the foresight to diversify its business risks.

Copper—Cerro de Pasco (16.8%)—One of the *lowest cost* producers in the world, due chiefly to the fact that its ores have an exceptionally high gold and silver content.

Cotton Goods—Naumkeag Steam Cotton Co. (15.1%)—Concentrates its efforts chiefly upon sheetings and pillow cases, in which lines style changes are virtually nonexistent, and upon sateens. Many of these goods are trade marked lines, for which a stable demand has been created. Except in seasons when the prices of raw cotton fluctuate violently, this company can normally return a high profit margin. (Note that the percentage of gross saved for net in 1926 was not quite $1/3$ as great as in 1927.)

Electrical Equipment—General Electric Co. (15.0%)—The *largest* producer of electrical equipment, and one of the most efficiently managed.



Food Products—Fleischmann Co. (30%); Coca-Cola Co. (28.2%); Canada Dry Ginger Ale (24.2%); Postum Co. (19.9%); Western Dairy Products (17.9%).

The first 4 corporations in the above list have certain characteristics in common: each is a leader in its own particular branch of the food products industry, from the standpoint of *size*; each, through effectively planned and executed national advertising, has managed to stimulate an increasing demand for its own trade marked articles; costs of raw materials in each case are relatively small, and price fluctuations in raw material markets are relatively unimportant, compared with ultimate selling price. Advertising of trade marked brands creates a business situation which is monopolistic in a certain sense—the only Fleischmann's yeast obtainable in this country is made by the Fleischmann Co.; the only Canada Dry Ginger Ale is made by the company of that name.

Many attempts to create such monopolistic situations are made; by no means all of them are successful.

Western Dairy Products appears to have achieved some real operating economies through the consolidation of a number of ice cream and other dairy products plants on the Western Coast.

Household Equipment and Supplies—Maytag Co. (23.6%)—The *largest* American producer of power-driven washing machines, output amounting to about a third of the country's total. Products are trade marked and nationally advertised. Has been one of the beneficiaries of the "electricity in the home" campaign. New sales and production plan may still further increase margin of profit in 1928.

Eureka Vacuum Cleaner Co. (14.2%)—The *largest* producer of vacuum cleaners, 1927 output of such machines having amounted to about 27 per cent of the country's total. Eureka's situation is in many respects similar to Maytag's.

American Ice Co. (15.4%)—*Largest* company engaged exclusively in production and distribution of ice. In certain of the territories in which it operates, it enjoys what is tantamount to a monopolistic situation.

Lead and Zinc—Consolidated Mining and Smelting (32.2%)—One of the *largest* Canadian metal producers and smelters. Richness of ore bodies and operating economies have enabled the company to show a wide margin of profit, despite generally unsatisfactory prices for nonferrous metals.

Machinery and Machine Equipment—National Supply Co. (33.7%)—One of the *largest* producers of equipment for the petroleum industry. Is an

old line company, and during more than 30 years of operation (with predecessors) has built up an extensive distributive chain and has impressed the trade with the intrinsic merits of its product. Controls certain valuable patents. Total income varies with prosperity in the oil industry, but margin of profit remains remarkably high year after year.

American Machine & Foundry Co. (20.6%)—Has virtual monopoly, directly and through subsidiary, of cigarette and cigar manufacturing machines. Due to commanding position, it is able to lease its tobacco products machines, rather than sell them outright; as number of machines in operation increases, margin of profit tends to increase even more rapidly. The company has also been increasing its gross during recent years by extension of its activities into other branches of the machinery industry.

Miscellaneous Mining and Smelting—Hecla Mining Co. (which stands at the very top of our list, with 41.7% of gross saved for net in 1927); **Patino Mines (30.5%); Homestake Mining (20.6%).**

The character of ore reserves owned, and therewith the cost of production, governs the margin of profit in this industry (assuming adequate market prices for the product).

Miscellaneous Manufacturing—American Arch Co. (29.9%)—Prior to the expiration of this company's basic patent in 1926, it had a virtual monopoly in the production and distribution of arch bricks for fireboxes of locomotives and stationary engines. Its depreciation policies (if any) are not known, so we are inclined to accept the computed figure reporting its margin of profit with considerable reservation. The company has been meeting increasing competition since 1926, and its sales have been declining.

Wright Aeronautical Corp. (22.0%); Curtiss Aeroplane & Motor Co. (19.7%).

It is a well established economic principle that a new product normally comes upon the market at scarcity prices. This, we believe, constitutes the chief explanation for the wide margin of profit shown by the two leading producers of aeroplanes and motors.

Miscellaneous Services—Bush Terminal Co. (32.5%); New York Dock Co. (32.5%).

The business of these two concerns is similar—control and operation of dock and warehouse facilities in New York Harbor. Once such properties are financed and constructed, cost of operation runs abnormally low.

Depreciation policies are peculiar. A considerable proportion of property value is represented by land, which, of course (if it is strate-

gically located in a city such as New York), appreciates rather than depreciates over a period of years. Such land has monopolistic characteristics. Docks and warehouses do not depreciate nearly so rapidly as factory equipment. Thus the total depreciation charges of Bush Terminal in 1927 amounted to less than 1 per cent of the stated value of buildings, piers, etc., owned. New York Dock Co., in its official balance sheet, does not separate its buildings and land values. Depreciation in 1927 amounted to 1.07 per cent of *total* property value.

We do not say that concerns of this character should charge greater amounts to depreciation each year; the question of land appreciation, and a balance between growing value here and decadence of land improvements, is a very nice one. We do, however, call attention to the fact that, were depreciation charges higher, the percentage of gross saved for net would decline.

Office and Business Equipment and Supplies—
Telautograph Corp. (31.6%); International Business Machines Corp. (27.9%); National Cash Register Co. (15.0%).

Each of these three concerns is the leader in its own section of the field; each controls basic patents of great value. Telautograph, like American Machine & Foundry, rents its equipment.

Oil—Houston Oil Co. (25.4%); Independent Oil & Gas (21.9%); Amerada Corp. (20.7%); Barnsdall Corp. (20.8%); Phillips Petroleum Co. (15.0%).

For a wide variety of reasons, which are not important to the present argument, these corporations were more fortunate in 1927 than the general run of units operating in the oil industry—which, as a whole, was gravely depressed. Houston is rapidly developing its natural gas properties, therewith increasing its revenues. Independent, Barnsdall and Amerada greatly increased their outputs by development of new pools. Methods of computing depletion in the oil industry vary so greatly that conclusions based upon the reported earnings of the smaller units are always subject to question.

Paper—International Paper Co. (16.2%); St. Regis Paper Co. (15.5%).

These concerns increased their margins, not through direct operations as paper manufacturers, but through extension into the public-utility field. It is estimated that around one-half of St. Regis' net revenue is now derived from dividends and equities of public-utility companies. International Paper has been rapidly developing its water-power resources.

Radio and Musical Instruments—Victor Talking Machine Co. (15.0%)—is the *largest* and most

successful producer of talking machines and records. Its trade marked products have monopolistic characteristics.

Zenith Radio Corp. (14.9%)—Produces high-grade receiving sets. It experienced a marked increase in sales in 1927, due chiefly to the growing popularity of electrically operated sets. Note that on smaller volume of business in 1926, the margin of profit was much more narrow.

Railroad Equipment—General American Tank Car Corp. (18.1%)—Manufactures and *leases* tank and refrigerator cars. The margin of profit necessarily varies with the volume of business handled, and volume varies chiefly with the quantity of oil and oil products turned out in any given year. Both production and consumption of oil and its products in 1927 set a new high record for all time.

Retail Trade—S. S. Kresge Co. (15.1%)—Retail trade is normally a low-margin industry. Kresge's remarkable showing can only be attributed to the especially effective policies of management which have been applied to that particular chain of stores.

Sugar—Central Aguirre Sugar Co. (30.4%); South Porto Rico Sugar Co. (20.7%); Fajardo Sugar Co. (15.0%); Manati Sugar Co. (15.8%).

The first 3 sugar companies above operate chiefly in Porto Rico, and owe their wide

margins of profit to the tariff differential. The fact that despite the grave depression in the sugar industry in 1927, 4 important companies were able to save 15 per cent or more of gross for net goes a long way in explaining, we believe, why the sugar industry as a whole has become overcapitalized and overdeveloped. When prices are above depression levels, the normal margin of profit in the industry is a wide one for efficient producers.

Theaters, Moving Pictures, and Amusements—Madison Square Garden Corp. (15.0%)—Not only owns the huge Madison Square Garden exhibition building, but promotes various sporting events. Enjoys what amounts to a monopoly on certain of these events, especially important prize fights and hockey contests. For this kind of entertainment patrons are willing to pay a fancy price. The company's depreciation policy on its building is liberal.

Tobacco Products—Congress Cigar Co. (15.8%)—Production costs have been greatly lowered by the introduction of machinery. All cigars are trade marked.

Conclusions

Throughout all of the foregoing, four themes predominate: size, monopolistic characteristics,

production costs, and selling price of goods. In the majority of cases, success in one or more of these accounts for the fact that certain corporations are able to report a margin of profit considerably above the average. Where other influences are at work, they are exceptional.

Size.—*On the average, the margin of profit (i.e., the percentage of gross income saved for net profit) tends to increase as the size of a given corporation increases.*

This, of course, is not always true. Some of America's largest concerns have turned out to be grotesque failures, from a box office standpoint. It takes better than average management successfully to exploit great mass. Capable management—exceptionally capable management—is an *a priori* assumption in the above and in all subsequent conclusions.

The recently published study of Col. Leonard P. Ayres, comparing the profits of the largest concern in each line of business with the second largest, gives further substantiation to the conclusion that it is the largest concern which *ordinarily* enjoys the most favorable situation.

Moreover, study of our complete table substantiates the old principle that *the margin of profit tends to increase as the amount of gross business increases from year to year*. Not always, but in the majority of cases, any concern

will show a wider margin of profit in year II than in year I if the total volume of business transacted in year II was greater than in year I. Another way of stating the same premise is to assert that net profit tends to increase more rapidly than total costs. The most notable exceptions occur in overdeveloped industries, where competition is especially keen, or at times when the price structure is unstable.

Monopoly.—*Possession of monopolistic or quasi-monopolistic characteristics tends to increase the margin of profit.*

It is high time to erase from the American mind the cartoon conception of monopoly as a great fat hoggish fellow who enriches himself by raising prices, thereby taking bread and butter out of the mouths of widows and orphans. That is an old-fashioned idea, and an old-fashioned system.

To-day monopoly, or what amounts to monopoly, is achieved in a great many ways. There are, of course, still a few almost complete monopolies of natural resources. But not many of them. One type of the "new monopoly" is that enjoyed by the railroads and public utilities in their territories. Geographical location of a given concern's industrial plants often gives what borders upon monopoly. Control of patents assuredly gives a monopoly over certain

types of goods. Control of trade names, brands, etc., gives a monopoly over certain other types of goods. A concern's long continuance in a given industry, its establishment of the reputability of its product, gives a kind of monopoly. Even that intangible item labeled "good will," if it actually exists, gives monopoly of a sort.

The current business conception of monopoly does not necessarily mean complete control, but rather limited control in a limited field. *The greater this control, the greater the effect upon the margin of profit.* Monopoly or quasi-monopoly must be cashed in if it is to achieve its ultimate profits possibilities; it must be successfully exploited. And it is also important to remember that no monopoly of the sort that we are here considering is ever secure; it is always threatened by competitors, and is often upset.

Production Costs.—The theory of every important business merger is that the consolidated concern will be able to reduce production costs, therewith increasing the margin of profit. Size plays a part in this aspect of the problem. It is so obvious that the margin of profit widens as production costs decline that one hardly need pause to give the principle even passing consideration.

It is to the point, however, to note the difference in the determination of production costs

in (a) extractive lines and (b) all other lines of industry. In the former case, costs are mainly determined by nature—or, one might say, by luck. The character and location of the resources that are being exploited constitute the deciding factor. Intelligence of management can always add something to the solution of the cost problem, even in the extractive industries. But such a program has its obvious limits.

In nonextractive industries, it is the intelligence of management which becomes the dominant factor in costs. Shrewd buying of raw materials and scientific engineering and production methods will, even for a relatively small concern, always have an important bearing upon the margin of profit that can be achieved.

Selling Price.—Being in most cases determined in competitive markets, selling prices are in the main beyond control of American industry. Most prices are determined for the producer, rather than by him. Better results have been attained in recent years by concentrating on production costs than by trying to control market prices.

Yet market price is, obviously, at all times one of the vital factors in establishing the margin of profit. Broadly speaking:

Large corporations have better control over selling prices than do smaller ones;

Corporations possessing monopolistic or quasi-monopolistic characteristics have better control over selling prices than those not possessing such characteristics;

The margin of profit will average out the highest, by and large, in times of relatively stable general prices;

Violent rises in commodity prices bring only a temporary enhancement in the margin of profit, and if the rise goes far enough soon begins to penalize margins;

Violent declines in prices gravely penalize margins, regardless of whether such declines begin first in the prices of raw materials or of finished goods.

To all of the principles exceptions can be taken. We believe them to be valid on the average and over the long term. We are especially impressed with the fact that what industry needs, if it wishes wide margins, is stable prices at an adequate level, despite the fact that many business men still cling to the belief that what they want is rising prices.

Margins of Various Industries.—Is there anything in the foregoing data to substantiate the assumption, now generally held, that the margin of profit in certain lines of business is habitually wider than in others?

It is our belief that there is ample support for

this contention. The accompanying table, reporting the percentage of gross saved for net by leading concerns in various lines, throws at least some light on this question. The table is far from complete, and the number of reporting concerns in some lines is so small as to make the figures merely suggestive, rather than conclusive. The reason the table is not more complete is a simple one; data to make it more complete are not available.

In view of the preceding discussion, analysis of this table becomes superfluous. The same factors which control the margins of individual concerns likewise control the margins of leading groups of concerns.

There has always been, in the past, a general long-term tendency to overcapitalize, and to set up conditions of overdevelopment and over-competition, in lines of industry which habitually return the widest margins of profit.

Moreover, one should not confuse the term "margin of profit" with "prosperity" or "profitableness." Many corporations which operate on a very narrow margin are highly profitable enterprises. Large volume on a narrow margin of profit will achieve the same end as smaller volume on a wider margin. But the most conspicuously and spectacularly successful con-

cerns, of course, are those which can achieve a large volume on a wide margin.

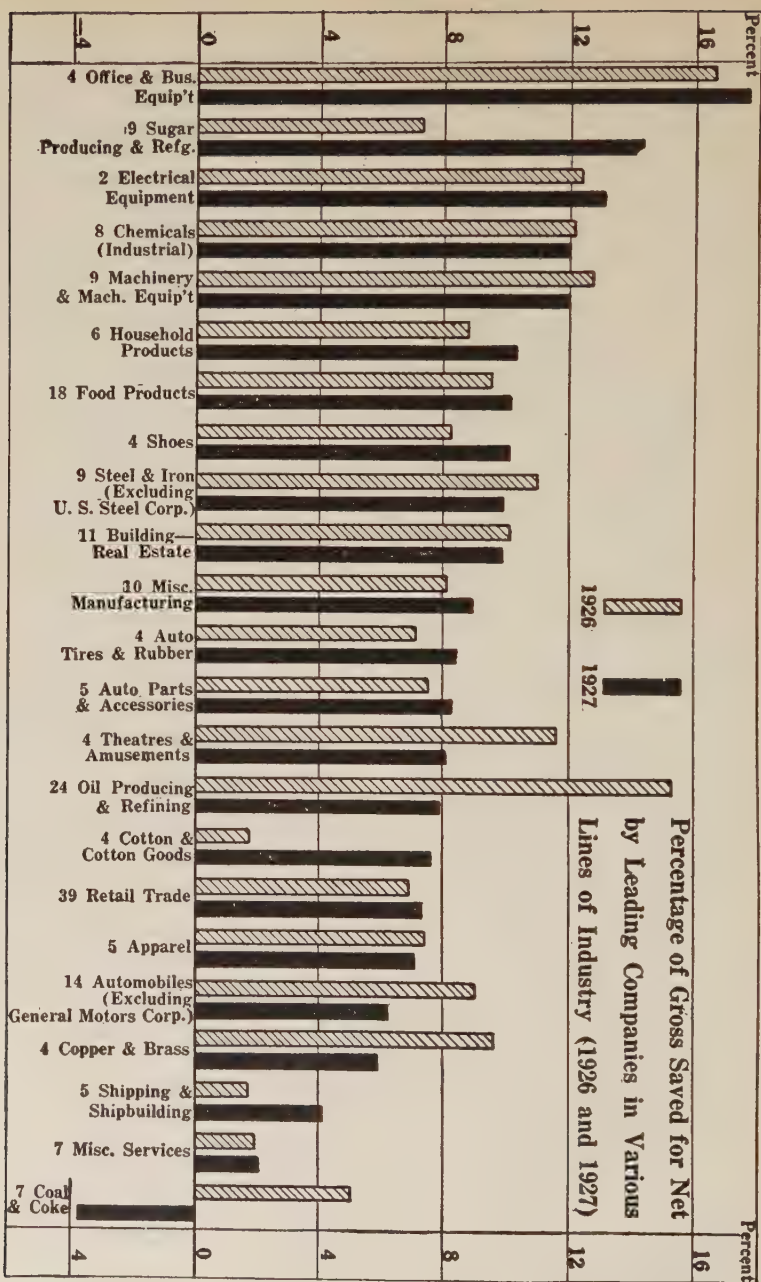
Finally, it must be remembered that the margin of profit customarily varies not only from industry to industry, *but that it varies*

TABLE 10

Margin of Profit by Representative Concerns in Different Lines

No. of Cos.	GROUP	% of Gross Saved for Net	
		1926	1927
4	Office & Business Equip. & Supl.....	16.6	17.7
9	Sugar	7.3	14.3
2	Electrical Equipment	12.4	13.1
8	Chemicals (industrial)	12.2	12.0
9	Machinery and Equipment.....	12.8	12.0
6	Household Products & Supplies.....	8.8	10.4
18	Food Products	9.5	10.2
4	Shoes	8.3	10.2
9	Steel & Iron (excl. U. S. Steel Corp.).	11.0	9.9
11	Building Equipment & Supplies.....	10.2	9.9
10	Miscellaneous Manufacturing	8.2	9.0
4	Automobile Tires	7.2	8.4
5	Automobile Parts & Accessories.....	7.6	8.3
4	Theaters, Motion Pictures & Amuse..	11.7	8.1
24	Oil	15.3	7.9
4	Cotton Goods	1.8	7.6
39	Retail Trade	6.9	7.4
5	Apparel	7.4	7.1
14	Automobiles (excl. Gen. Mts. Corp.)..	9.1	6.3
4	Copper	9.7	5.9
5	Shipping & Shipbuilding.....	1.7	4.1
7	Miscellaneous Services	1.9	2.1
7	Coal	5.1	d3.7

d-Deficit



radically within any given industry. It is quite significant that, in an industry as gravely depressed as the cotton goods industry was in 1927, at least one producer could show a 15 per cent margin on sales.

There is usually a predominating trend throughout a single industry at any given time, but the results of wise management tend toward a level above the average, while the results of less efficient management tend to fall below the average. The chart on page 78 preceding, reporting the 1927 margin of profit returned by 18 concerns operating in the food products industry, graphically illustrates this point.

**B—STUDY OF CORPORATIONS WHICH SAVED
LESS THAN $5\frac{1}{2}$ PER CENT OF GROSS
FOR NET**

The first section of this chapter, dealing with the percentage of gross saved for net by leading industrial concerns, gave especial attention to the 50 corporations—on our list of 235—which reported the highest percentage of gross saved for net in 1927.

This section will focus attention upon the concerns which reported relatively the smallest margins, or which reported minus margins (deficits). It will deal especially with the 71 com-

panies, on our full list of 235, which reported less than $5\frac{1}{2}$ per cent of gross saved for net.

For convenience, and to avoid the necessity of reference back to the earlier discussion, the list of those concerns which reported margins of less than $5\frac{1}{2}$ per cent is presented again on pages 98-101 immediately following. As reprinted, this list has been arranged according to industrial divisions.

And having in the earlier portion of the analysis worked from specific facts to general principles, it will be unnecessary to go over the same route again. A reverse process will be adopted: we shall seek to work from general principles back to specific facts; to see whether the general principles earlier outlined will stand the test of new facts; to see whether additional generalities will likewise stand the test of new facts.

In the preceding section, particular stress was laid upon the importance of size, monopolistic or quasi-monopolistic characteristics, production costs, and selling prices. It was contended that the largest corporations, the ones that possess monopolistic attributes, the ones that have the most secure control over their costs, or the ones that have the greatest control over, or the greatest good fortune in respect to, their selling prices, are normally among those which report the

highest margins of profit. Does study of the situations of the 71 concerns on our list which reported margins of less than 51½ per cent in 1927 substantiate or nullify any of these principles?

Size.—Only a few of the corporations included in the list of 71 that saved less than 51½ per cent of gross for net in 1927 are the leaders, or the largest, either in their own particular industries or in their branches of a given industry.

A total of 23 industrial classifications is represented in this list. If, for reasons which will shortly become obvious, we momentarily omit 5 of these broad classifications—coal, food products, oil, miscellaneous services, and retail trade—it is entirely true that all the concerns in the other 18 classifications are, with only 3 exceptions, relatively small.

In fact, taking the entire list of 71 corporations and omitting only the 10 largest, the total gross income of the remaining 61 was just about equal to the gross income of the General Motors Corporation alone in 1927.

There is also significance in the comparative sizes of the gross incomes, as between the years 1926 and 1927, of the group that reported the widest margins of profit and the group that reported the smallest margins.

The total gross of the 50 concerns that re-

(Continued on page 101)

TABLE 11

71 Industrials (Selected from List of 235) which
Reported Profit Margins of Less
Than $5\frac{1}{2}\%$ in 1927

Apparel

	% of Gross Saved for Net	
	1926	1927
Phillips-Jones Corp.	4.89	5.14
Ipswich Mills	4.13	d6.77

Automobiles and Trucks

Stutz Motor Car Co.	4.27	4.10
Gardner Motor Co.	0.42	d2.55
White Motor Co.	3.35	d2.73
Yellow Truck & Coach Mfg. Co.	2.56	d3.27
Peerless Motor Car Corp.	4.75	d5.16
Graham-Paige Motors Corp.	1.36	d19.40

Automobile Parts and Accessories

Kelsey-Hayes Wheel Corp.....	4.53	4.42
Martin-Parry Corp.	9.58	0.24

Automobile Tires

Ajax Rubber Co., Inc.	d0.14	d11.30
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Building Equipment and Supplies

Walworth Co.	4.59	4.48
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Coal

Consolidation Coal Co.	8.89	5.00
Elk Horn Coal Corp.	16.40	5.00
Pittsburgh Coal Co.	d3.76	d2.68
Phila. & Reading Coal & Iron.....	2.65	d6.73
Pittsburgh Terminal Coal Corp.	5.32	d14.90
Pennsylvania Coal & Coke Corp.....	0.30	d17.10

PERCENTAGE OF GROSS INCOME

99

TABLE 11 CONTINUED

Copper

	% of Gross Saved for Net	
	1926	1927
Calumet & Hecla Cons. Copper Co.....	10.20	4.07
Granby Cons. Mining Co.	d3.17	d8.38
United Verde Extension Co.	3.77	d8.65

Cotton Goods

Pacific Mills	0.49	5.40
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Food Products (Other Than Meat)

Southern Dairies, Inc.	8.90	5.47
Loft, Inc.	1.87	5.45
Borden Co.	5.46	5.38
Pillsbury Flour Mills	3.07	4.64
Sweets Co. of America	3.12	3.82
Washburn Crosby Co.	1.78	3.33
Kraft-Phenix Cheese Co.	2.26	2.45

Household Equipment and Supplies

Williams Oil-O-Matic Heating Corp....	22.60	d2.59
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Machinery and Machine Equipment

Worthington Pump & Mach. Corp.....	2.16	3.63
Atlas Tack Corp.....	0.50	d2.73
Transue & Williams Stl. Forg.....	d4.85	0.40

Meat Packing

Cudahy Packing Co.	2.56	1.82
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Miscellaneous Mining and Smelting

Federated Metals Corp.	0.00	1.61
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Miscellaneous Manufacturing

National Enamel. & Stamp. Co.....	2.51	2.34
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TABLE 11 CONTINUED

Miscellaneous Services

	% of Gross Saved for Net	
	1926	1927
U. S. Distributing Corp.	3.43	3.01
Commercial Credit Co.	1.28	1.71
Commercial Invest. Trust Co.	1.73	1.63
American Railway Express Co.....	0.78	0.76

Oil

Tide Water Oil Co.	8.40	4.94
Simms Petroleum Co.	18.30	2.47
Atlantic Refining Co.	4.97	2.34
Texas Pacific Coal & Oil Co.....	18.40	0.86
Panhandle Prod. & Ref. Co.	d1.92	0.82
Marland Oil Co.	13.60	d11.00
Superior Oil Corp.	3.48	d22.90

Railroad Equipment

Lima Locomotive Works, Inc.	9.41	d2.92
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Retail Trade

Metropolitan Chain Stores	4.81	5.46
Grant (W. T.) Co.	5.91	5.33
Arnold Constable Corp.	3.19	5.29
American Wholesale Corp.	3.91	5.20
National Tea Co.	2.96	3.49
Bloomingdale Bros.	5.18	3.30
National Dept. Stores	3.44	3.04
Kroger Groc. & Bak. Co.	2.81	2.70
Pender (David) Grocery Co.	2.70	2.54
Gimbel Bros.	2.74	1.21
National Bellas Hess Co.	0.79	0.90
Kresge Dept. Stores, Inc.	d3.73	d3.47
Consolidated Distributors, Inc.	3.98	d8.00

TABLE 11 CONTINUED

Shipping and Shipbuilding

	% of Gross Saved for Net	
	1926	1927
Intern'l Mercantile Marine Co.	0.01	4.88
Electric Boat Co.	10.00	3.96
American-Hawaiian S. S. Co.	d7.92	2.31
Submarine Boat Corp.	d3.15	d17.30

Silk Goods

Century Ribbon Mills, Inc.	d3.91	1.89
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Steel

Superior Steel Corp.	6.15	d1.04
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Theaters, Motion Pictures, and Amusements

Universal Pictures Co., Inc.	7.05	5.48
Pathé Exchange, Inc.	5.89	d10.10

Woolen Goods

Arlington Mills	0.33	1.16
Hamilton Woolen Co.	d1.40	d12.60

d=Deficit.

ported the widest margins was 9 per cent *larger* in 1927 than in 1926.

The total gross of the 71 concerns which showed the narrowest margins was 8 per cent *smaller* in 1927 than in 1926.

The contrast still remains valid—but in somewhat lesser degree—if General Motors (the world's largest industrial concern) is omitted from the wide-margin list, and if the 24 concerns which showed a deficit in 1927 are omitted from the narrow-margin list.

It is almost invariably true that a slump in gross income in any given year is accompanied by a scaling down of the margin of profit. The reason lies in the fact that costs cannot ordinarily be reduced with sufficient rapidity to counterbalance the shrinkage in gross.

Monopoly.—With less than a dozen exceptions, none of the corporations on our list of narrow-margin concerns possesses any important monopolistic characteristics other than the control of certain trade-marks and patents. Possible or partial exceptions are:

SOUTHERN DAIRIES, which has a dominating position in certain of the territories that it serves.

BORDEN Co., which in the service of fresh milk to New York City has only one large-scale rival, and which works out a somewhat similar situation in nearby suburban districts.

U. S. DISTRIBUTING CORP., which has monopolistic control of contracts for the transfer of freight landed by certain railroads at the Port of New York, as well as monopolistic contracts for other types of trucking service.

AMERICAN RAILWAY EXPRESS Co., which has a complete monopoly of railway express service, but which relies upon the volume of its business, rather than upon the margin of its profit, to return adequate earnings.

The moving picture concerns possess monopolistic right to exhibit their wares in certain theaters, but hardly ever is it true that these theaters are the only ones available to the theater-going public in a given community.

Thus in only one of these exceptional cases is the monopolistic characteristic a complete one. For all practical purposes, and excepting only the complete control of trade marks and patents, it may be asserted that the list of 71 narrow margin concerns is a nonmonopolistic list.

Production Costs and Prices.—These two factors are merely different aspects of the same problem. No production costs are penalizingly high if selling prices are still higher. The inability to effect a nice adjustment between the two factors is in many lines of business the chief reason for inadequate margins, and at all times is one of the chief reasons for business depression.

It is instructive to observe how these factors, in different ways and in various combinations, affected the margins of profit of specific concerns in 1927.

(1) Abnormally low selling prices or rates for service were principally responsible for the 1927 depression in the COAL, OIL and SHIPPING trades, and for the fact that so many specific concerns in each of these basic lines suffered sharp reductions in margins.

(2) In the APPAREL, COTTON GOODS, SILK GOODS, and WOOLEN GOODS lines it was the *instability* of prices, more than their *level* that worked the greatest harm. Costs of raw

materials fluctuated over a wide range; the prices of finished goods followed raw material costs sluggishly and irregularly; for no considerable period of time could an adequate adjustment between costs and selling prices be maintained.

In the cases of all 7 of the industries named above, overproduction, either of raw materials or of finished goods or of services offered, constituted the chief price menace.

(3) The problem takes still another angle in the case of certain sections of the AUTOMOBILE industry, and of the MINING trades.

It assuredly cannot be said that 1927 automobile prices were not adequate for the general run of efficient producers; it will be recalled that both General Motors and Packard won margins of 16 per cent or better, and numerous other car producers operated on a margin that was higher than the average.

Yet our list shows that one motor car company operated on a 4.1 per cent margin, and that 6 other well-known producers returned a *deficit*. Compared with the volume of business which they were able to win, and the going prices which they were able to get for their products in a *competitive market*, their production and selling costs were simply too high to return an adequate profit.

The same is true of various mining concerns. Metal prices were reasonably good in 1927, as is demonstrated by the considerable number of producers who won really handsome margins. But even at the going level of prices, not a few concerns found that their production costs were too high to permit a satisfactory return.

Other Causes for Depression.—There were also a few industries in 1927 which suffered depression for reasons that were directly chargeable neither to prices nor production costs, as well as certain individual concerns which suffered a heavy loss in margins because they were in one way or another dependent either upon depressed industries or upon other concerns which were temporarily in difficulties.

THE RAILWAY EQUIPMENT industry, for example, was not depressed because prices of locomotives and freight cars were too low, nor because costs (if measured by anything like normal standards) were too high. It was depressed merely because the railroads cut their purchases of new equipment down to the minimum.

The SHIPBUILDING industry was depressed for a similar reason. There is still a surplus of ships left over from the war period. New ship construction in America has been at a low level since 1920. Prices and costs are operative, but only

in an indirect way. The shipbuilders could not show a fair profit mainly because of the scantiness of the business that was to be had at any terms.

At least two important concerns on our list, aside from those operating in the oil industry proper, had their profits cut down because of the depression in that industry. A substantial portion of the product of the WALWORTH MANUFACTURING Co. is used in the oil fields; the same is true of WORTHINGTON PUMP & MACHINERY CORP.

And two other concerns suffered because of the 1927 collapse in production at the Ford Motor Co's plant: MARTIN-PARRY CORP. formerly devoted a great part of its capacity to the manufacture of commercial bodies for Ford, and this motor producer likewise was a large customer of TRANSUE & WILLIAMS STEEL FORGING Co.

Miscellaneous Causes.—Other miscellaneous causes of narrow margins in specific cases in 1927 were:

(a) Changes in style. The leading product of IPSWICH MILLS has been circular knit ladies' hosiery, but the ladies now demand the full-fashioned variety. Two of the products of ATLAS TACK CORP. have been tacks and shoe eyelets; carpets have been taken up and stored in

the garret; low-cut shoes, which have almost entirely replaced the high ones in this country, take not half as many eyelets per pair as the old styled shoe.

(b) Abnormally but probably temporarily high costs due to special circumstances. KELSEY HAYES WHEEL CORP. found its consolidation program more expensive than had been hoped for. PHILLIPS-JONES CORP. made heavy expenditures financing its expansion program. WILLIAMS OIL-O-MATIC HEATING CORP. found the competitive situation in the oil burner industry not to its liking, and was obliged to develop a new type of product and to make abnormal sales expenditures.

(c) In a few other cases changes in management proved temporarily disruptive. And in addition there were various other individual situations which arose to check profits, but which need not be gone into here because they illustrate no basic principles.

When all is said and done, we come once more to our four most important determinants of the variations in the margin of profit: size, monopoly or quasi-monopoly, production costs, and prices. As has been pointed out in the paragraphs immediately preceding, there are numerous other causes for unsatisfactory margins, but none of these is ordinarily of transcending sig-

nificance, so far as the great bulk of industrial companies is concerned.

Size does not vary much from year to year: the largest producer of product X in 1927 is quite likely to be the largest producer of that same product in 1928 and 1929.

Monopolistic privileges vary somewhat more, but in most cases essential changes in this respect come about quite slowly.

Costs and prices are the most active variables in the profits equation. In the majority of cases (note important exceptions following) a forecast as to whether an individual corporation's margin of profit is to become more or less satisfactory must pivot directly upon a forecast as to whether firmer control over costs and prices can be gained, or whether existing control is to be lost.

When Narrow Margins Are Recompensed for by Large Volume.—We now may turn attention to those industries and classes of concerns which do not depend so much upon the margin of profit for the total of their net earnings as they depend upon the volume of the product produced or distributed, or upon the rapidity of turnover. Typical examples of the narrow margin, large volume lines are:

RETAIL TRADE in all of its leading divisions;
Certain branches of the FOOD PRODUCTS industry, and especially FLOUR MILLING.

Certain branches of the MISCELLANEOUS SERVICES industry, and especially that branch generally referred to as FINANCING and represented on our list by COMMERCIAL CREDIT Co. and COMMERCIAL INVESTMENT TRUST.

All of the basic principles which we have noted as being the chief determinants in the margin of profit for the general run of corporations enter in here. Certainly size is a vital factor. Monopolistic possession of trade-marked brands and locations is essential. Costs and prices, especially when prices are changing rapidly, become dominant influences.

But the main quest is always for volume or for rapidity of turnover. Except in periods of grave price irregularities, volume is the index to total profits in cases of this type. Volume, and volume alone, recompenses for a narrow margin. And hence, although a wide margin of profit is not *always* necessary to insure adequate total profits for a given corporation, it is *almost always* necessary unless it is recompensed for by large volume.

Opinion

The computation of the income account of every corporation, indeed of every business con-

cern of every kind and degree, begins with gross income.

Gross income is a variable. It varies not only from corporation to corporation, but the gross of a given corporation often varies materially from year to year.

Net profit is also a variable. It varies not only in response to changes in costs and selling prices, and for other miscellaneous reasons, *but it likewise varies in response to variations in gross.*

Competent security analysis must always start from a knowledge and explanation of what has occurred in the past. On the basis of such knowledge and explanation, the analysis proceeds to an estimate of future probabilities. And on the basis of analysis of the past and the estimate of the future, decisions are made which result in the surrender of a security which a given individual holds, or in the retention of that security, or in a new purchase of that security. Such decisions, in any single year, involve the transfer not merely of millions, but of both gross and net income.

Without any reservations whatsoever, we take the position that, so far as it relates to an individual corporation, no *thoroughgoing* analysis of any security market situation can be made

unless it includes a study of the past trends of both gross and net income.

An official income account statement which omits to state gross income is an incomplete statement, and the security owner who does not have knowledge of the trend of the gross income of the corporation in which he is interested lacks a vital element in the factual basis upon which he reasons out his future course of action.

Stock Exchange's Position.—Not only the New York Stock Exchange, but every other security exchange which has in effect become a public institution, can be of vast service to American security owners by insisting that they have *complete* income accounts made available.

The New York Stock Exchange has already gone far in this direction. We are informed that a corporation which now applies for the listing of its securities is obliged to show a strong case if the Exchange authorities allow it the privilege of declining to report its gross.

Unhappily, requirements on most of the so-called "outside" exchanges are much less rigid. And it is also true that even the New York Stock Exchange has no power whatsoever over the corporations which listed their stocks in the period before requirements relative to a statement of gross became as exacting as they are at the present time.

But the New York Stock Exchange is a powerful institution. In its actions and requirements (if they are just) it sets up standards of respectability to which, over a period of time, even those corporations which are not obliged to do so *tend* to conform. In this way, by *vigorously* insisting upon *complete* financial statements—if it is so inclined to do—it can exert a moral as well as an active pressure.

And those outside exchanges which have not yet gone so far in their requirements as the New York Stock Exchange has gone, must, if confidence in them as public institutions is steadily to increase, devote more and more attention to the viewpoint of the security owner who is striving to make economic decisions based upon actual fact, rather than upon fancy, guess, or hearsay.

Some Exceptions.—Note that in the foregoing the statement has not been made, at any point, that *every* corporation, the securities of which are offered to the public to buy and sell, should make public a statement of its gross income. That would be both a rash demand and a stupid one. Without doubt there are individual cases (how many we do not attempt to estimate) in which, due to competitive or other governing circumstances, regular publication of the gross

income item would be actually inimical to the best welfare of stockholders.

But the valid exceptions are probably much less frequent than they are generally assumed to be. And the stockholder who has the opportunity to watch and compare the trends of both GROSS and NET INCOME from year to year is in a better position to make an intelligent decision as to whether he will hold, sell, or buy a given corporation's securities than is the stockholder who is obliged to be content with an INCOMPLETE financial report.

CHAPTER VI

THE DISTRIBUTION OF NET PROFIT

BROADLY speaking, it may be said that the aggregate net profit of the large group of leading industrial concerns here under study was distributed somewhat as follows in 1927:

- 10 Per cent consumed by fixed charges.
- 10 Per cent consumed by preferred dividends.
- 55 Per cent consumed by common dividends.
- 5 Per cent consumed by miscellaneous charges and adjustments.
- 20 Per cent theoretically available for surplus.

These are round terms, presented only with the idea of giving a bird's-eye view of how profits were consumed. The exact percentages are set forth in the tables on the following pages.

Due to the decline in net which occurred in 1927, as compared with 1926, it is to be gravely questioned whether the distribution shown above is a typical one, even for a year of normal prosperity.

Indeed, in an earlier chapter, the opinion was expressed that while the amount paid out for common dividends in 1927 might not have been

dangerously great *for that particular year*, and while the amount left available for surplus might not have been dangerously small *in that particular year*, still the former item was much too large and the latter item much too small to be accepted as criteria for a period of years.

Although standards of measurement are admittedly lacking, we lean to the opinion that the distribution of net profit in 1926 was in much more conservative balance, and was much more typical of safe and average prosperity-time performance, than was the 1927 division. Rounding off the data to the nearest multiple of 5, the 1926 distribution was roughly, as follows:

- 10 Per cent consumed by fixed charges.
- 10 Per cent consumed by preferred dividends.
- 45 Per cent consumed by common dividends.
- 5 Per cent consumed by miscellaneous charges and adjustments.
- 30 Per cent theoretically available for surplus.

The essential difference in distribution for these two years, it will be noted, is in the amounts paid to common stockholders and available for surplus. Common dividends rose to some extent actually in 1927 as compared with 1926, but to an even greater extent they rose *relatively*—relative to the total of net profit. The sum carried to surplus in the later year was necessarily scaled down accordingly. *It was the*

variation in the AMOUNT of net profit which accounted for the greater portion of the variation in the DISTRIBUTION of net.

Distribution By Various Lines.—Tables 14, 15, and 16 are for the most part self-explanatory. They show how the leading companies in various lines of business disposed of their aggregate profit in 1927. In the main, they constitute not much more than rough standards of measurement, but presumably better than no standards at all, inasmuch as corresponding data, covering such a wide range of industrial divisions and of such recent date, are not elsewhere available, so far as our knowledge goes.

One explanatory point, however, may be to the purpose of those who study these group totals. Data for each group are based upon an aggregate situation, applicable to *all* of the corporations falling in that group which are on our list. For example, take the second entry in Table 14, reporting that 11 coal companies paid out, in the aggregate, 95.7 per cent of their net profits for fixed charges in 1927. This simply means that the sum of the fixed charges of all eleven of these companies was 95.7 per cent of the sum of their net profit.

It does not mean that *each* of the 11 coal companies that were studied had a funded debt. Two of them, as a matter of fact, had no funded

debt whatsoever. But we have gone on the assumption that we will come closer to reporting an actual aggregate (or average) situation throughout a given industry if we deal only with totals, and do not attempt, in this phase of the study, to make nice individual distinctions.

The utility of the tables, if the aggregates are

TABLE 12

The Distribution of Net Profit—1926 and 1927

544 INDUSTRIAL CORPORATIONS, INCLUDING GENERAL MOTORS AND U. S. STEEL CORPORATIONS, BUT EXCLUDING STANDARD OIL CO. OF NEW JERSEY BECAUSE OF READJUSTMENT WHICH OCCURRED IN THAT COMPANY'S CAPITAL STRUCTURE.

	1926		1927	
	Amount (Millions)	% of Net Profit	Amount (Millions)	% of Net Profit
Fixed charges.....	224.29	8.33%	235.10	9.66%
Preferred dividends.	245.49	9.11	238.03	9.78
Common dividends.	1,268.84	47.10	1,354.77	55.64
Carried to surplus..	787.20	29.22	472.68	19.41
Misc. charges.....	168.24	6.24	134.12	5.51
Net profit	2,694.06	100.00	2,434.70	100.00

542 INDUSTRIAL CORPORATIONS, EXCLUDING GENERAL MOTORS AND U. S. STEEL CORPORATIONS.

	1926		1927	
	Amount (Millions)	% of Net Profit	Amount (Millions)	% of Net Profit
Fixed charges	205.82	8.68%	217.03	10.37%
Preferred dividends.	212.62	8.96	203.70	9.73
Common dividends.	1,129.33	47.60	1,170.12	55.89
Carried to surplus.	761.28	32.08	361.27	17.25
Misc. charges	63.64	2.68	141.50	6.76
Net profit	2,372.69	100.00	2,093.62	100.00

to be used in contrasting individual situations, is in no wise vitiated by this method of computation. The common stockholder in a coal company which had a funded debt of zero in 1927 does not need to be informed that he was considerably better off than the *average* coal company stockholder, any more than the share-

TABLE 13

The Distribution of Net Income—1926 and 1927

544 INDUSTRIAL CORPORATIONS. IT WILL BE RECALLED THAT WE HERE USE THE TERM NET INCOME TO DESIGNATE THAT PORTION OF NET PROFIT THAT REMAINS AFTER FIXED CHARGES HAVE BEEN CARED FOR. NET INCOME IS THE PORTION OF NET PROFIT THAT IS AVAILABLE FOR COMMON AND PREFERRED STOCKHOLDERS, AND SURPLUS.

	1926		1927	
	Amount (Millions)	% of Net Income	Amount (Millions)	% of Net Income
Preferred dividends.	245.49	9.94%	238.03	10.82%
Common dividends.	1,268.84	51.37	1,354.77	61.59
Carried to surplus.	787.20	31.87	472.68	21.49
Misc. charges	168.24	6.82	134.12	6.10
Net income	2,469.77	100.00	2,199.60	100.00

542 INDUSTRIAL CORPORATIONS, EXCLUDING GENERAL MOTORS AND U. S. STEEL CORPORATIONS.

	1926		1927	
	Amount (Millions)	% of Net Income	Amount (Millions)	% of Net Income
Preferred dividends.	212.62	9.81%	203.70	10.86%
Common dividends.	1,129.33	52.12	1,170.12	62.35
Carried to surplus.	761.28	35.13	361.27	19.25
Misc. charges	63.54	2.94	141.50	7.54
Net income	2,166.87	100.00	1,876.59	100.00

holder in a company which had to pay out 200 per cent of net profit in fixed charges needs to be told that the value of his shares is considerably less than the value of the shares of the company which made only average payments for fixed charges.

A later chapter will deal exclusively with funded debt, and in that section of the study we shall differentiate between those concerns which have no funded debt and those which do have such prior obligations. For this reason also, it will be unnecessary to give more extended attention to the funded debt situation for the moment.

Senior Obligations.—But there is grist for our mill in Table 15, reporting the total amounts (in percentage terms) paid out to bondholders and preferred stockholders together. In the aggregate, our full list of 544 concerns paid out 19.4 per cent of net profit to these classes of security owners in 1927. Why did the leading companies in some lines of business pay out so much more than the average, while others paid out so much less?

Consideration may first be given to those lines which, as reported in Table 15, made payments to bond and preferred stockholders which were well above the average:

TABLE 14

**Percentage of Net Profit Paid for Fixed Charges in
1927 By Various Groups**

Number of Companies Included	INDUSTRY	% of Net Profit for Fixed Charges in 1927
4	Woolen Goods	129.00%
11	Coal	95.70
7	Shipping and Shipbuilding	42.00
13	Sugar	36.10
7	Paper	35.40
7	Cotton Goods	31.10
14	Theaters, Moving Pictures, and Amuse- ments	29.10
9	Automobile Tires	28.00
3	Meat Packing	25.00
21	Steel (excl. U. S. Steel)	25.10
4	Silk Goods	21.60
22	Steel (incl. U. S. Steel)	20.80
17	Copper	16.70
51	Oil	14.10
13	Railroad Equipment	8.29
14	Miscellaneous Service	8.19
9	Drugs, Medicines, Cosmetics, etc.....	8.17
24	Machinery and Machine Equipment....	7.98
14	Misc. Mining and Smelting.....	7.43
31	Building Equipment and Supplies	7.30
13	Apparel	7.02
23	Automobiles (excl. Gen'l Motors)	6.83
17	Tobacco Products	5.08
14	Household Equipment and Supplies....	4.51
36	Food Products	3.64
7	Agricultural Implements	3.56
33	Miscellaneous Manufacturing	3.32
6	Electrical Equipment	3.31
51	Retail Trade—Chain and Dept. Stores, etc.	2.60

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TABLE 14 CONCLUDED

Number of Companies Included	INDUSTRY	% of Net Profit for Fixed Charges in 1927
22	Automobile Parts and Accessories.....	2.42
14	Chemicals (Industrial)	2.19
8	Radio and Musical Instruments	2.10
24	Automobiles (incl. Gen'l Motors)	1.79
7	Office and Business Equip. and Supplies	1.65
7	Leather and Shoes	1.05
7	Lead and Zinc	0.56
3	Fertilizers	Deficit

TABLE 15

Percentage of Net Profit Paid for Fixed Charges Plus Preferred Dividends in 1927 By Various Groups

Number of Companies Included	INDUSTRY	% of Net Profit for Fxd. Chgs. & Pfd. Divs. in 1927
4	Woolen Goods	194.80%
11	Coal	103.30
7	Paper	60.50
13	Sugar	54.40
9	Automobile Tires	54.20
7	Shipping and Shipbuilding	52.30
21	Steel (excl. U. S. Steel)	47.80
22	Steel (incl. U. S. Steel)	44.10
14	Theaters, Moving Pictures, and Amuse- ments	33.20
4	Silk Goods	31.20
7	Cotton Goods	31.10
7	Agricultural Implements	28.10
3	Meat Packing	27.60
14	Miscellaneous Service	26.60
13	Railroad Equipment	24.40

TABLE 15 CONCLUDED

Number of Companies Included	INDUSTRY	% of Net Profit for Exd. Chgs. & Pfd. Divs. in 1927
8	Radio and Musical Instruments.....	23.80
23	Automobiles (excl. Gen'l Motors)	23.70
14	Misc. Mining and Smelting	20.40
13	Apparel	20.20
7	Office and Business Equip. and Supplies	18.00
51	Oil	16.80
17	Copper	16.70
24	Machinery and Machine Equipment....	16.20
31	Building Equipment and Supplies.....	15.30
33	Miscellaneous Manufacturing	13.99
36	Food Products	13.00
17	Tobacco Products	12.50
14	Household Equipment and Supplies....	11.50
22	Automobile Parts and Accessories	10.80
51	Retail Trade—Chain and Dept. Stores, etc.	9.94
9	Drugs, Medicines, Cosmetics, etc.....	9.03
24	Automobiles (incl. Gen'l Motors)	9.02
7	Leather and Shoes	8.54
14	Chemicals (Industrial)	8.08
6	Electrical Equipment	7.29
7	Lead and Zinc	4.16
3	Fertilizers	Deficit

(1) The inadequacy of total net profit in 1927 was the chief reason why such a large percentage of net went to holders of senior obligations in the WOOLEN GOODS, COAL, SHIPPING & SHIP-BUILDING, SILK GOODS, COTTON GOODS, and RAILROAD EQUIPMENT industries.

(2) Industries which find it necessary to employ large sums of capital in property, plant equipment, or inventories usually find it to their purpose, correspondingly, to raise a considerable amount of that capital in the bond and preferred stock markets. Funds raised in these markets are, after all, about the cheapest funds that industry can find. It will be noted that virtually all of the lines of industry which paid out large sums to owners of senior securities in 1927, require large property accounts or large inventories.

(3) The oldest and most basic industries customarily have the greatest portion of their invested capital in bonds and preferred stocks. They raised their capital in an era when it was much more difficult to distribute common stocks to the general public than it is at the present time.

(4) At least 4 industries near the top of Table 15—AUTOMOBILE TIRES, MEAT PACKING, SUGAR, and SHIPPING & SHIPBUILDING—"paid through the nose" for their funded debt, as the Wall Street phrase has it. They were gravely affected by the 1920-1921 business depression and the only way they could procure the necessary capital for their escape was by placing heavy mortgages (bonded indebtedness) upon their properties.

Small Payments for Senior Obligations.—Toward the bottom of Table 15 are found lines of industry of the following general classes:

(1) Those requiring relatively small property, plant equipment, and inventories, such as MISCELLANEOUS DRUGS, MEDICINES & COSMETICS, HOUSEHOLD EQUIPMENT & SUPPLIES, MISCELLANEOUS MANUFACTURING, and FOOD PRODUCTS. In most of these cases, much of the capital that is acquired is utilized in building up consumer preference for trade-marked articles. Such a program, being essentially speculative in nature, does not attract the average purchaser of conservative securities.

(2) In a different way, the speculative character of the extractive industries determines their capital structures. Where the speculative chance is a long one, a fixed promise to pay a stated sum in interest or dividends does not have much meaning. Wildcatting in the OIL industry, for example, or prospecting and development in the MINING industries, are not types of business enterprise which can successfully be financed in the bond or preferred stock markets. Those who finance such activities take large risks and enjoy the *possibilities* of reaping great gains. They speculate. Cautious bond buyers do not wish to speculate at all; cautious pre-

ferred stock buyers wish to speculate only a little.

(3) In some lines of industry—*e.g.*, TOBACCO, RETAIL TRADE, etc.—a long period of prosperity has made it possible for the leading companies therein to retire (out of profits) substantial portions of the obligations senior to their common stocks.

(4) And there are still other lines which were so essentially speculative when they first began to develop—*e.g.*, MACHINERY, AUTOMOBILE ACCESSORIES, AUTOMOBILES, and CHEMICALS—that they were unable to raise capital in the more conservative sections of the security markets. They were obliged to turn to the common stock markets, and their common stockholders now find themselves the better off because of this earlier necessity.

To summarize: *The character and long-term experience of a given industry are quite influential in determining the capital structure of the average corporation operating in that industry. It goes without saying that, in times of business depression, when net profits are shrinking, common dividends in lines of business which have resorted less generously to the bond and preferred stock markets are, on the average, the more likely to be maintained.*

TABLE 16

**Percentage of Net Profits Paid Out in Common
Dividends in 1927 By Various Groups**

Number of Companies Included	INDUSTRY	% of Net Profits for Common Dividends
11	Coal	109.40%
17	Copper	81.80
51	Oil	81.40
7	Lead and Zinc	74.60
3	Meat Packing	70.60
9	Drugs, Medicines, Cosmetics, etc.	69.60
17	Tobacco Products	66.40
6	Electrical Equipment	65.40
24	Machinery and Machine Equipment...	65.40
13	Railroad Equipment	64.90
22	Automobile Parts and Accessories....	64.50
33	Miscellaneous Manufacturing	61.90
14	Chemicals (Industrial)	61.30
23	Automobiles (excl. Gen'l Motors)....	59.10
14	Household Equipment and Supplies....	58.05
24	Automobiles (incl. Gen'l Motors)	57.80
36	Food Products	57.30
14	Misc. Mining and Smelting	54.60
31	Building Equipment and Supplies	54.00
51	Retail Trade—Chain and Dept. Stores, etc.	41.60
13	Sugar	39.90
14	Theaters, Moving Pictures, and Amusements	38.40
13	Apparel	38.10
7	Office and Business Equip. and Supplies	37.70
22	Steel (incl. U. S. Steel)	36.30
7	Leather and Shoes	36.30
14	Miscellaneous Service	35.11
4	Woolen Goods	34.80
4	Silk Goods	30.90

TABLE 16 CONCLUDED

Number of Companies Included	INDUSTRY	% of Net Profits for Common Dividends
7	Paper	25.90
7	Cotton Goods	24.40
21	Steel (excl. U. S. Steel)	24.30
8	Radio and Musical Instruments	23.90
7	Agricultural Implements	22.00
7	Shipping and Shipbuilding	21.80
9	Automobile Tires	9.49
3	Fertilizers	Deficit

Common Dividends.—The order of the entries in Table 16 is not a precise reversal of the order in Table 15, but it is a rough reversal of that order. In most cases it is true that the lines of industry which were obliged to pay the smallest portion of their net profit to bond and preferred stockholders in 1927 were correspondingly able to pay the largest portion of net to common stockholders in that year. Important exceptions were (a) those lines which suffered inadequate incomes, and (b) the extractive industries, which (because they are exhausting their resources) can conservatively pay out a larger portion of their net to security owners than can many branches of nonextractive industry.

Table 17 throws an interesting side light on this section of the study. It shows the 30 concerns on our full list of 544 which were obliged to

pay the greatest percentage of their net profit to bond and preferred stockholders in 1927.

At first glance, it might be assumed that this tabulation does nothing more than to report, in another way, certain of the corporations which had inadequate incomes in 1927. It does that—and something more. It shows the *effects* of heavy senior obligations, in certain cases, upon the common stockholder's position.

TABLE 17

**The 30 Concerns on List of 544 Which Were Obligated
to Apply Greatest Portions of Total Net Profit
to Fixed Charges and Preferred
Dividends in 1927**

COMPANY	% of Net Profit for Fxd. Chgs. & Pfd. Divs. in 1927
Oil Well Supply Co.	96.6%
Gimbel Bros.	96.6
Cuban Dominican Sugar Corp.	94.7
American Ship & Commerce	92.2
American Sugar Refining Co.	91.8
U. S. Rubber Co.	91.8
Durham Hosiery Mills	88.4
Gould Coupler Co.	87.8
Reis (Robt.) & Co.	85.7
Motion Picture Capital	85.3
Continental Baking Corp.	83.6
Southern Dairies, Inc.	82.5
Consolidated Textile Corp.	80.7
Nat'l Distillers Products Corp.	80.6
American-Hawaiian S. S. Co.	80.0

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TABLE 17 CONCLUDED

COMPANY	% of Net Profit for Fxd. Chgs. & Pfd. Divs. in 1927
International Paper Co.	80.0
Commercial Credit Co.	79.7
Remington Arms Co., Inc.	79.5
Bowman Biltmore Hotels Corp.	79.4
Beacon Oil Co.	78.7
New York Dock Co.	77.5
U. S. Distributing Corp.	76.6
Cuba Cane Sugar Corp.	74.5
National Dept. Stores, Inc.	74.1
Otis Steel Co.	74.1
Walworth Co.	73.4
Atlantic Refining Co.	72.1
Dodge Bros., Inc.	71.9
Bush Terminal Co.	71.9
Fageol Motors	70.0

Numerically, these 30 concerns constitute just 51½ per cent of the total list of 544. *But their 1927 fixed charges and preferred stock requirements constituted 14.2 per cent of the total fixed and preferred stock charges of the full list of 544.*

To carry this section of the study to its logical conclusion, there is appended (see Table 18) a list of those concerns in our full list of 544 which, at the end of 1927, had neither bonded debt nor preferred stock outstanding ahead of the common stock. They number 149, or not quite 27½ per cent of the total.

TABLE 18

**Concerns on List of 544 Which Had Neither Funded
Debt Nor Preferred Stock at End of 1927**

Ahumada Lead Co.	Calumet & Arizona Mining Co.
Air Reduction Co., Inc.	Calumet & Hecla Consol. Mng. Corp.
Alliance Realty Co.	Canada Dry Ginger Ale, Inc.
Amerada Corp.	Caterpillar Tractor Co.
Amer. Bosch Magneto Corp.	Central Aguirre Sugar Co.
Amer. Druggists Syndicate	Centrifugal Pipe Corp.
Amer. Express Co.	Cerro de Pasco Copper Corp.
Amer. International Corp.	Certo Corp.
Amer. Railway Express	Coca-Cola, Inc.
Amer. Safety Razor Corp.	Commercial Solvents
Amer. Stores Co.	Compania Swift, International
Arlington Mills	Congress Cigar Co.
Arnold Constable Corp.	Consolidated Distributors, Inc.
Art Metal Construction Co.	Consol. Mining & Smelting Co.
Associated Dry Goods	Coty, Inc.
Atlas Tack Corp.	Crex Carpet Co.
Babcock & Wilcox Co.	Diamond Match Co.
Bliss (E. W.) Co.	Dome Mines, Ltd.
Bon Ami Co.	Eaton Axle & Spring Co.
Borden Co.	Electric Auto-Lite Co.
Borg & Beck Co.	Electric Boat Co.
Briggs Mfg. Co.	Eureka Pipe Line Co.
Brunswick Term. & Ry. Sec. Co.	Eureka Vacuum Cleaner Co.
Buckeye Pipe Line Co.	Ford Motor Co. of Canada
Burroughs Adding Mach. Co.	Forhan Co.
Butte Copper & Zinc Co.	
Butte & Superior Mining Co.	
California Packing Corp.	
Callahan Zinc Lead Co.	

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TABLE 18 CONTINUED

Freeport Texas Co.	Marlin-Rockwell Corp.
Freshman (Chas.) Co., Inc.	Martin-Parry Corp.
Gabriel Snubber Mfg. Co.	May Dept. Stores Co.
Gardner Motor Co., Inc.	Maytag Co.
Gillette Safety Razor Co.	Mergenthaler Linotype Co.
Granby Consol. Mining, Smelting & Pwr.	Miami Copper Co.
Grant (W. T.) Co. of Dela.	Morgan Lithograph Co.
Great Lakes Dredge & Dock Co.	Morris (Philip) & Co., Ltd.
Greene Cananea Copper Co.	Motor Wheel Corp.
Hamilton Woolen Co.	Mother Lode Coalition Mines
Hart Schaffner & Marx	Nash Motors Co.
Hazeltine Corp.	Nashawena Mills
Hecla Mining Co.	National Cash Register Co.
Hire's (Chas. E.) Co.	National Transit Co.
Hollinger Cons. Gold Mines	Naumkeag Steam Cotton Co.
Homestake Mining Co.	New Cornelia Copper Co.
Household Products, Inc.	Newmont Mining Co.
Howe Sound Co.	Nipissing Mines Co., Ltd.
Hupp Motor Car Corp.	Northern Pipe Line Co.
Illinois Brick Co.	Nunnally Co.
Illinois Pacific Glass Co.	Ohio Oil Co.
Indiana Pipe Line Co.	Oppenheim Collins & Co.
Intercontinental Rubber Co.	Packard Motor Car Co.
Island Creek Coal Co.	Park-Utah Consol. Mines Co.
Laurentide Co., Ltd.	Parke, Davis & Co.
Lehn & Fink Products Co.	Peerless Motor Car Corp.
Life Savers, Inc.	Pender (David) Grocery Co.
Lima Locomotive Wks, Inc.	Pepperell Mfg. Co.
Magma Copper Co.	Pittsburgh Plate Glass Co.
Maracaibo Oil Explor. Corp.	Prairie Oil & Gas Co.

TABLE 18 CONCLUDED

Prairie Pipe Line Co.	Torrington Co. (of Maine)
Pratt & Lambert, Inc.	Transue & Williams Steel
Pyrene Mfg. Co.	Forging Co.
Reynolds Tobacco Co.	United Fruit Co.
Salt Creek Producers	United States Hoffman Co.
Assoc., Inc.	United Verde Ext. Mining
Sears, Roebuck & Co.	Co.
Shredded Wheat Co.	Utah Copper Co.
Simmons Co.	Vacuum Oil Co.
South West Pa. Pipe Lines	Vanadium Corp. of
Standard Oil of California	America
Standard Oil (Indiana)	Westinghouse Air Brake
Standard Oil (Kansas)	Co.
Standard Oil (Kentucky)	Weston Elec. Instrument
Stromberg Carburetor Co.	Corp.
of Amer.	White Motor Co.
Stromberg-Carlson Mfg.	Williams Oil-O-Matic Heat
Co.	Corp.
Teck-Hughes Gold Mines	Worthington Pump &
Texas Gulf Sulphur Co.	Mach. Co.
Texas Pacific Coal & Oil	Wright Aeronautical Corp.
Timken Roller Bearing Co.	Yale & Towne Mfg. Co.
Tobacco Products Corp.	

CHAPTER VII

EARNINGS ON INVESTED CAPITAL

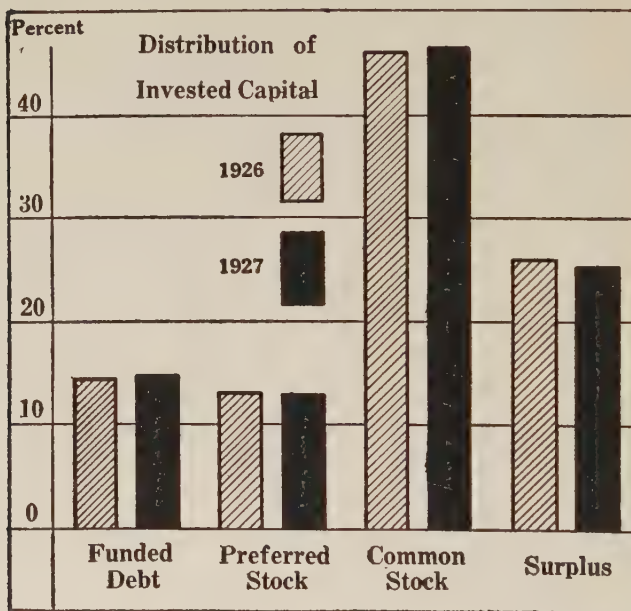
THE invested capital of a corporation, for present purposes, is taken as the par, or stated balance sheet, value of all securities outstanding, plus surplus. Appropriated surplus or reserves, such as reserves for contingencies, for inventory adjustments, etc., are excluded.

Invested capital, as we compute it, reports the money that was placed in a business when it was inaugurated, plus the sums that have been raised by the additional sale of securities (if any), plus that portion of profits (won either directly from operations or in other ways) which has been withheld from security owners. Stated in other terms, it is approximately equal to *net* assets, which in turn are equal to *total* assets minus current liabilities.

The question might be raised as to why invested capital, which represents the great bulk of a concern's assets, should be computed from the liabilities side of the balance sheet. This is done purely as a matter of convenience. It would be possible to obtain the same result by

taking the sum of the items on the assets side and deducting therefrom the sum of certain items on the liabilities side. But the final result would be no nearer the truth.

For all practical purposes, the shorter method here used gives fully as reliable a result, *for the*



simple reason that every balance sheet must balance; in striking this balance, accounting practice inevitably works into the items reporting par value of securities and unappropriated surplus values which almost precisely correspond

TABLE 19

The Distribution of Invested Capital

544 INDUSTRIAL CORPORATIONS, INCLUDING GENERAL MOTORS AND U. S. STEEL CORPORATIONS, BUT EXCLUDING STANDARD OIL OF NEW JERSEY BECAUSE OF READJUSTMENTS MADE IN THAT COMPANY'S CAPITAL STRUCTURE.

	—1926—		—1927—	
	Amount (Millions)	% of Inv. Capital	Amount (Millions)	% of Inv. Capital
Funded debt..	\$3,670.35	14.50%	\$3,866.55	14.69%
Preferred stock	3,326.27	13.15	3,441.08	13.08
Common stock	11,717.82	46.30	12,274.77	46.65
Surplus	6,592.90	26.05	6,731.65	25.58
Total invested capital	25,307.24	100.00	26,315.05	100.00

542 INDUSTRIAL CORPORATIONS, EXCLUDING GENERAL MOTORS AND U. S. STEEL.

	—1926—		—1927—	
	Amount (Millions)	% of Inv. Capital	Amount (Millions)	% of Inv. Capital
Funded debt..	\$3,177.66	13.96%	\$3,391.37	14.34%
Preferred stock	2,856.07	12.55	2,945.88	12.46
Common stock	10,774.52	47.34	11,128.15	47.06
Surplus	5,950.06	26.15	6,180.78	26.14
Total invested capital	22,758.21	100.00	23,647.18	100.00

with what may be termed the total of invested capital.

Determination of Amount.—The size of the invested capital of a successful corporation is determined chiefly by two main factors: (a) the nature of the business in which the concern operates and (2) the policies of management.

As will be statistically demonstrated in the

subsequent discussion, there are certain lines of enterprise which by their very nature require larger capital investments to bring in a dollar in net income than are required in other lines. Most commonly, the lines which require the largest plant investments or the largest inventories, or which experience the greatest inventory hazards, require the largest invested capital. Lines in which that intangible item referred to as good will has been built up by advertising and paid for out of earnings ordinarily show the lowest invested capital.

There are two types of managerial policies which have bearing upon the size of invested capital: accounting policies and fiscal policies.

Accounting policies need not detain us at this point. It has already been seen how widely these vary from one corporation to another. Where assets are merely increased by what is called "writing them up" on the balance sheet, the net result will be revealed in the surplus account, and earnings on invested capital (alleged invested capital) will be correspondingly penalized. If assets are written down, or are conservatively evaluated, earnings on invested capital will be likely to make a more favorable showing. In the majority of cases, it goes without saying, the purpose is to achieve a fair valuation. But nevertheless it is to be borne in

mind that a figure reporting invested capital always contains a certain leaven of opinion—the opinion of those who evaluate the assets.

Financial Policies.—Of much greater importance in determining the size of invested capital are corporate financial policies. The primary problem of every business enterprise is to win profits; having won them, there then arises the problem of what to do with them.

The quandary of the largest corporations is precisely the same as that of the corner grocer who, having set aside a modest surplus, asks himself whether he shall enlarge his own store, or buy an interest in the shoe shop in the next block, or buy Liberty Bonds, or what not.

In essence, it is the question of how the largest net return may be won. And the answer that is ventured to that question determines (or should determine) the policies of corporate management in augmenting the size of invested capital. Will the greatest good of the owners of the business be achieved if we (as the management) pay them 60 per cent of a year's net profit and retain 40 per cent for expansion, renewals, reserves against a rainy day, etc., or will the greatest good be achieved if we retain only 20 per cent, and pay out the other 80 per cent so that our security owners can invest a portion of our profits in other business enterprises?

Mr. Alfred P. Sloan, Jr., president of the General Motors Corp., in a recent statement relative to that concern's policies, phrased the problem in this happy fashion:

When we invest our stockholders' money as trustees, we must do it on the firm belief that the capital is safely invested and that the return to the stockholders, as a result of the investment, will be fair and equitable; otherwise we have no right to make the investment. . . . Therefore, to the extent General Motors is able to employ additional capital in extending its operations, all other things equal, so its profits must necessarily increase because each dollar must make a showing for itself. If, for illustration, \$100,000,000 were left in the business out of a given year's earnings, and a reasonable return on that \$100,000,000 is 15 per cent, the next year's profits should increase, all things being equal, by \$15,000,000—or we will not have done a constructive thing.

We fancy that Mr. Sloan's ideas on this important subject are more concise than those of many other business executives. He does not say so bluntly, but his opinion *appears* to be that, if General Motors cannot earn somewhere around 15 per cent on the money that it withholds from stockholders, it has no right to withhold these sums.

Judgments in such matters, being made by human beings, are always fallible. In many cases (for example, the case of General Motors

just referred to) the decision to retain large sums for expansion or other corporate purposes has turned out to be wise even beyond the wildest dreams of the owners of the business. In many other cases, similar decisions have resulted only in harsh disappointments.

A careful estimate of future possibilities should be the governing motive at all times. Obviously, policies will vary from year to year, and they will vary decisively over a period of years. But too often it has been true that it has been the LACK of any scientific policy whatsoever in regard to the disposition of surplus, rather than a mistaken policy, which has accounted for the gravest disappointments.

A Changing Base.—Always, in utilizing figures reporting earnings on invested capital, it should be borne in mind that the invested capital itself is a *progressive* value. The capital investment of successful concerns will increase from year to year. Therefore, the earnings on that investment, as computed on the basis of invested capital at the close of each year, will normally tend to move in a rather narrow groove, simply because the investment itself tends to increase as the profits increase.

The study of earnings on *original* invested capital is something quite different from that which is being pursued here. The present con-

cern is with earnings in a given year on the capital employed in that year. It has nothing to do with earnings on original invested capital.

Earnings on Invested Capital in Different Lines

In round terms, our full list of corporations earned $10\frac{1}{2}$ per cent on their total invested capital in 1926 and about 9 per cent in 1927.

Table 20 reports the following:

(a) Combined earnings on invested capital by each important group, as computed by aggregating results for all corporations on our full list which fall within a given group. The figure in parentheses after the name of each group reports the number of corporations included in computing the group result. The arrangement is from the highest to the lowest earnings in each group, according to 1927 results.

(b) The table also shows the corporation in each group (so far as our full list goes) which had the *highest* percentage earnings on its invested capital in 1927, and likewise the corporation in the group which had the *lowest* percentage earnings in that same year. These additional data are presented not only for the purpose of illustrating the wide variation in results which are achieved by the various individual units in a given group within a single year,

but also on the assumption that a report of extremes may prove a helpful source of reference to those who, as security owners, may wish to consult such a record of group and individual experience from time to time.

Having considered group trends somewhat in detail in the preceding analysis dealing with the margin of profit, the whys and wherefores of group position in Table 20 accompanying may here be handled in summary fashion.

TABLE 20

Earnings on Invested Capital by Various Industrial Lines

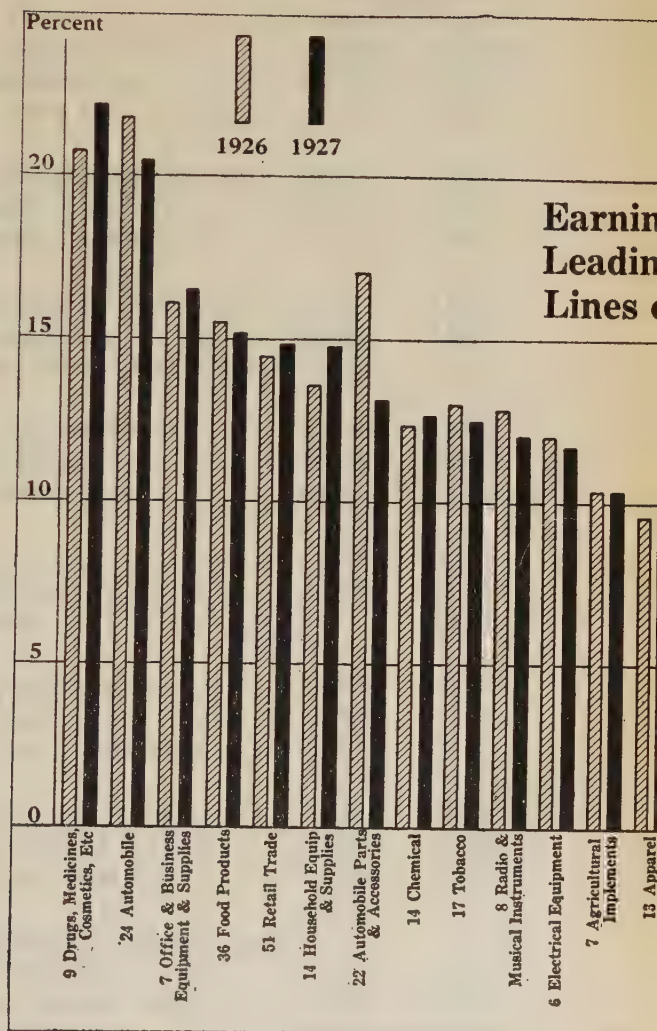
(See accompanying text for explanation of data.)

	Earned on Invested Capital	
	1926	1927
Drugs, Medicines, Cosmetics, etc. (9)	20.77%	22.22%
Lambert Co.	161.80	181.10
Amer. Druggists Syndicate.....	d3.30	8.09
Automobiles (24)	21.83	20.49
Nash Motors Co.	60.50	47.60
Graham-Paige Motors Corp.....	4.90	d35.40
Lead and Zinc (7)	21.89	17.45
Consol. Mining & Smelting Co....	47.90	45.30
Amer. Zinc, Lead & Smelt. Co....	0.22	d2.19
Office and Business Equip. and Sup- plies (7)	16.14	16.53
Burroughs Adding Mach. Co....	20.79	21.67
Royal Typewriter Co.	*9.78	*9.63

CORPORATION PROFITS

TABLE 20 CONTINUED

	Earned on Invested Capital	
	1926	1927
Shoes (4)	14.22%	16.52%
Melville Shoe Corp.	24.08	24.29
Endicott-Johnson Corp.	8.76	10.13
Food Products (36)	15.51	15.18
Canada Dry Ginger Ale, Inc.....	48.31	57.80
Sweets Co. of America, Inc.....	*3.05	*3.54
Retail Trade (51)	14.49	14.87
Jewel Tea Co., Inc.	30.80	28.20
Consolidated Distributors, Inc.....	2.21	d3.95
Household Equipment and Supplies		
(14)	13.58	14.80
Maytag Co.	71.00	57.20
Crex Carpet Co.	d0.82	d4.84
Automobile Parts and Accessories		
(22)	17.09	13.16
Gabriel Snubber Mfg. Co.....	52.00	42.90
Reynolds Spring Co.	d2.67	d2.69
Chemicals (14)	12.34	12.68
Commercial Solvents Corp.....	24.80	26.40
National Distillers Products Corp.	0.83	1.73
Tobacco Products (17)	13.05	12.54
Congress Cigar Co.	32.50	40.64
Eisenlohr (Otto) & Bros., Inc.....	4.83	3.21
Radio and Musical Instruments (8) .	12.87	12.09
Radio Corp. of America	13.85	23.24
Freshman (Chas.) Co., Inc.....	26.95	d31.05



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EARNINGS ON INVESTED CAPITAL 143

TABLE 20 CONTINUED

	Earned on Invested Capital	
	1926	1927
Miscellaneous Services (14)	10.34%	12.03%
Curtis Publishing Co.....	48.55	54.25
New York Dock Co.	3.62	3.87
Miscellaneous Manufacturing (33)..	12.35	11.96
Gillette Safety Razor Co.....	31.08	33.31
Nat'l Enameling & Stamp. Co....	2.26	2.45
Electrical Equipment (6).....	12.05	11.73
General Electric Co.	14.35	14.41
Amer. Brown Boveri Elec. Co....	3.43	2.20
Agricultural Implements (7).....	10.36	10.35
Caterpillar Tractor Co.....	22.00	26.60
Emerson-Brantingham Co.	d0.02	d3.29
Apparel (13)	9.60	9.58
Gotham Silk Hosiery Co.	16.30	21.10
Ipswich Mills	7.16	d9.92
Misc. Mining and Smelting (14)....	9.83	9.56
Hecla Mining Co.	73.30	39.30
U. S. Smelting & Refining Co....	5.08	5.00
Building Equip. and Supplies (31)..	11.36	9.53
Great Lakes Dredge & Dock Co...	11.20	22.40
Standard Plate Glass Co.....	2.13	d2,63
Theaters, Moving Pictures, and Amusements (14)	9.87	8.67
Madison Sq. Garden Corp.....	15.90	17.36
Pathé Exchange, Inc.	10.87	d15.34

TABLE 20 CONTINUED

	Earned on Invested Capital	
	1926	1927
Automobile Tires (9)	7.10%	8.39%
Goodrich (B. F.) Co.	8.83	15.90
Ajax Rubber Co., Inc.....	d0.24	d12.90
Silk Goods (4)	1.59	8.13
Blumenthal (Sidney) & Co.....	1.28	13.88
Century Ribbon Mills	d3.09	1.41
Copper (17)	7.93	7.47
Cerro de Pasco Copper Corp.....	58.20	54.60
United Verde Ext. Mining Co.....	1.89	d3.20
Machinery & Machine Equipment		
(24)	9.16	7.41
Evans Auto Loading Co.....	25.11	28.07
Chicago Nipple Mfg. Co.	0.52	d2.31
Railroad Equipment (13)	9.47	7.30
Gen'l Railway Signal Co.....	29.30	17.14
Lima Locomotive Wks., Inc.....	11.88	d1.41
Cotton Goods (7)	1.93	6.00
Naumkeag Steam Cotton Co.....	4.15	14.54
Pacific Mills	0.65	3.93
Meat Packing (3)	6.66	5.64
Cudahy Packing Co.	9.50	6.85
Swift & Co.*	6.51	* 5.35
Steel (22)	7.26	5.63
U. S. Cast Iron P. & Fdy.....	17.20	12.38
Superior Steel Corp.	5.96	d0.87

TABLE 20 CONCLUDED

	Earned on Invested Capital	
	1926	1927
Oil (51)	10.60%	5.50%
Tidal Osage Oil Co.	18.60	20.25
Superior Oil Corp. *	1.56	d10.43
Paper (7)	5.01	5.10
Abitibi Power & Paper Co.....	15.36	13.81
International Paper Co.	2.95	3.93
Sugar (13)	3.89	5.09
South Porto Rico Sugar Co.....	8.49	12.08
National Sugar Refining Co.....	17.04	1.14
Shipping & Shipbuilding (7).....	2.90	4.08
Eastern S. S. Lines, Inc..... *	6.00	*10.55
Submarine Boat Corp.	d1.34	d9.75
Coal (11)	3.61	1.51
Island Creek Coal Co.	14.00	17.10
Penn. Coal & Coke Corp.....	0.17	d6.17
Leather (3)	2.52	1.10
Barnet Leather Co., Inc.....	6.72	3.64
Amer. Hide & Leather Co.	0.53	0.49
Woolen Goods (4)	d4.42	0.90
Botany Consol. Mills, Inc.....	d11.74	6.57
Hamilton Woolen Co.....	d13.59	d8.88
Fertilizers (3)	3.82	d1.39
International Agricultural Corp...	6.06	0.32
Anglo-Chilean Consol. Nitrate Co..	1.03	d3.79

* Fixed charges estimated.

d=Deficit.

Top Half of the Group List.—Following are the *chief* reasons why certain groups showed percentage earnings on their invested capital that were greater than the average for all groups:

(1) *Trade prosperity, so vigorous and widespread that it tended to buoy up the profits of the MAJORITY of important concerns in each group.* This applied to virtually all of the groups above the average, excepting LEAD & ZINC; RADIO, etc., and APPAREL.

(2) *The capital investment in certain lines of business is customarily and notoriously small, relative to the net return.* This is especially true where the industry's products are nationally known trade-marked articles, and where demand has been stimulated by constant advertising, *paid for out of earnings.* Examples: DRUGS, MEDICINES AND COSMETICS; OFFICE AND BUSINESS EQUIPMENT; FOOD PRODUCTS; HOUSEHOLD EQUIPMENT AND SUPPLIES; RADIO, MUSICAL INSTRUMENTS, etc., and special branches of MISCELLANEOUS MANUFACTURING and the APPAREL trade.

The LEAD AND ZINC industry, as reflected by the results of 7 leading companies, gets into the top half of the table through something of a fluke. The industry as a whole was not especially prosperous in 1927, and it is also true that

required capital investment is usually rather large. It so happens that the 7 leading concerns for which comparable data are available were more prosperous than the average producer in this industry in 1927 and that they seemingly valued their assets more conservatively than the average.

Note that the ELECTRICAL EQUIPMENT and AGRICULTURAL IMPLEMENTS industries, both of which were quite prosperous in 1927, stand in the lower section of the top half of the list reporting earnings on invested capital. They fall into such a position because the sums that they must keep tied up in plant equipment and inventories are normally quite large.

Note further that TOBACCO PRODUCTS and RETAIL TRADE, both of which lines customarily return a low *margin of profit on sales*, return relatively high profits on invested capital. Volume and rapidity of turnover supply the touchstones necessary to return large *total* profits.

The Bottom Half.—In the bottom half of the list—that is, among those groups which earned less than the average in 1927—one finds again two *chief* reasons to account for group position:

(1) *Trade depression*, which for one reason or another occasioned low profits or the absence of profits in SILK GOODS; RAILROAD EQUIPMENT;

COTTON GOODS; OIL; PAPER; SUGAR REFINING; SHIPPING; COAL; WOOLEN GOODS; FERTILIZERS, and LEATHER.

(2) *Customary requirements of a relatively LARGE amount of invested capital, due to the basic nature of the particular industry itself.* Examples: THEATERS, MOVING PICTURES, ETC.; all of the extractive industries and the metal treating industries (especially STEEL); MACHINERY; MEAT PACKING; PAPER, and AUTOMOBILE TIRES. Stiff competition and the resultant inadequacy in selling prices also contributed to the low earnings on invested capital returned by the automobile tire industry.

Thus it is clear that at all times the basic nature of the normal capital requirements in a given line of business, along with trade conditions in that line at any given time, constitute two of the main determinants of the earnings which the leading concerns in that line will return upon their invested capital. *These same factors likewise tend to expand or to limit the earnings on invested capital by the most successful concerns in each line: an individual concern operating in a depressed trade, or in a trade which normally requires a large invested capital, is an exceptional concern rather than an average one if it can return conspicuously high earnings.*

Relationship of Earnings on Invested Capital and the Margin of Profit

It will be recalled that in the preceding study of the margin of profit returned by various individual concerns, attention was directed to the 50 companies which saved the *greatest* percentage of gross for net in 1927.

Further analysis reveals that these 50 corporations combined earned 18.5 per cent on their total invested capital in 1927.

The companies on our earlier list which saved less than $5\frac{1}{2}$ per cent of gross for net, and more than zero, numbered 47. Their combined earnings on total invested capital amounted to 5.1 per cent.

On the face of the facts, then, there is an obvious relationship between the margin of profit and earnings on invested capital.

Not always, but in the majority of cases, those corporations which succeed in winning the widest margins of profit likewise show the greatest earnings on invested capital, and vice versa. Notable exceptions are to be found in such instances as RETAIL TRADE and MEAT PACKING, where the volume of business and the rapidity of turnover compensate for low margins.

Individual Extremes

Following are two more lists reporting individual extremes. Table 21 lists the 50 concerns, selected from our full list of 544, which returned the highest earnings on invested capital in 1927; Table 22 lists the 50 which showed the lowest returns.

In view of the previous discussion in this chapter, and the earlier extended discussion of the determinants of the margin of profit, neither of these lists needs much further study. It is only necessary to classify the specific concerns according to industrial lines, to recall the trade conditions which existed in each line in 1927 and the normal capital requirements of each line, and to apply the tests of costs and selling prices to determine, promptly, why certain names appear in Table 21 and why certain other names appear in Table 22.

On both lists there are a few names the positions of which cannot be explained on the foregoing bases. But there are not many such. And the fact that there are any at all merely emphasizes the proposition that for various reasons there always exist those exceptional performers which run counter to the general trend—those relatively few concerns which can win good profits even in a depressed industry, and those

which somehow manage to return low profits even in a generally prosperous industry. Any report or computation of average profits gives nothing more than a rough standard against which individual situations can be measured and explained.

On the average, it is true that a high rate of earnings on invested capital constitutes an earmark of a concern which is commercially successful if judged on ANY OTHER economic basis.

Conversely, it is true on the average that a low rate of earnings on invested capital suggests a concern which is meeting with economic difficulties and disappointments.

In either case, the situation may be temporary. It is the function of careful security analysis to forecast in this respect. And we believe that the foregoing analysis makes clear the fact that no forecast of an individual corporation's prospect carries much force unless it rests upon a forecast of the outlook for the line of business in which that corporation is engaged.

TABLE 21

**The 50 Corporations (Selected from Our Full List)
Which Had Highest Earnings on Invested
Capital in 1927**

(Arranged in order from highest to lowest, on basis of 1927 results. To offer a basis of comparison, data for 1926 are also shown.)

	Earned on Invested Capital	
	1926	1927
Lambert Co.	161.80%	181.10%
Coty, Inc.	70.80	60.40
Canada Dry Ginger Ale, Inc.....	48.31	57.80
Maytag Co.	71.00	57.20
Cerro de Pasco Copper Corp.....	58.20	54.60
Curtis Publishing Co.	48.55	54.25
Newmont Mining Corp.	24.42	48.75
Nash Motors Co.	60.50	47.60
Consol. Mining & Smelting Co.....	47.90	45.30
Gabriel Snubber Mfg. Co.....	52.00	42.90
Electric Auto-Lite Co.	36.80	41.30
Congress Cigar Co.	32.50	40.64
Hecla Mining Co.	73.30	39.30
Life Savers, Inc.	73.00	37.55
Fleischmann Co.	36.90	36.80
Postum Co., Inc.	64.90	36.50
Gillette Safety Razor Co.	31.08	33.31
Timken Roller Bearing Co.	35.00	32.30
General Motors Corp.	29.40	31.00
Certo Corp.	27.60	29.36
Eureka Vacuum Cleaner Co.....	33.28	28.54
Jewel Tea Co., Inc.....	30.80	28.20
Evans Auto Loading Co.	25.11	28.07
Borg & Beck Co.	28.90	27.70
Gold Dust Corp.	12.82	27.27
General Baking Corp.	*23.03	*26.89
Caterpillar Tractor Co.	22.00	26.60

TABLE 21 CONCLUDED

	Earned on Invested Capital	
	1926	1927
Woolworth (F. W.) & Co.	*24.00%	*26.48%
Commercial Solvents Corp.	24.80	26.40
Coca-Cola Co.	27.29	26.21
Penney (J. C.) Co.	27.40	25.61
Forhan Co.	24.50	25.60
Wrigley (Wm. Jr.) Co.	26.05	25.48
Melville Shoe Corp.	24.08	24.29
Kroger Grocery & Baking Co.....	25.36	23.72
Chrysler Corp.	21.10	23.40
Radio Corp. of America.....	13.85	23.24
Packard Motor Car Co.	34.10	23.00
Great Lakes Dredge & Dock Co.....	11.20	22.40
Grant (W. T.) Co.	24.62	22.31
Burroughs Adding Mach. Co.	20.79	21.67
Great A. & P. Stores	19.67	21.65
Pratt & Lambert, Inc.	23.70	21.60
Hollander (A.) & Son, Inc.	23.74	21.40
Parke, Davis & Co.	20.81	21.25
Montgomery Ward & Co.	16.10	21.22
Fanny Farmer Candy Shops, Inc....	19.45	21.13
Gotham Silk Hosiery Co.	16.30	21.10
Schulte Retail Stores	17.42	20.81
Stewart Warner Speedometer Corp..	*20.57	*20.79

* Net profit is partly estimated—fixed charges being computed and added to the reported net income.

d=Deficit.

TABLE 22

**The 50 Corporations (Selected from Our Full List)
Which Had Lowest Earnings on Invested
Capital in 1927**

	Earned on Invested Capital	
	1926	1927
American Hide & Leather Co.....	0.53%	0.49%
Continental Oil Co. *	7.17	0.48
Advance Rumley Co.	3.10	0.44
Kelly-Springfield Tire Co.....d	11.70	0.43
Louisiana Oil Refining Corp.....	13.36	0.37
Intern'l Agricultural Corp.	6.06	0.32
Transue & Williams Steel Forg. Co... d	5.75	0.32
Van Raalte Co., Inc.	2.09	0.31
Texas Pacific Coal & Oil.....	8.07	0.30
Electric Boat Co.	6.00	0.27
Eureka Pipe Line Co. d	0.13	d9.92
Amer. Agricultural Chem. Co.....	4.40	d0.56
Gardner Motor Co., Inc.....	1.65	d0.82
Peerless Motor Car Corp.	9.37	d0.82
Pittsburgh Coal Co.	9.82	d0.83
Superior Steel Corp.	5.96	d0.87
Lima Locomotive Wks., Inc.	11.88	d1.41
Granby Consol. Mining, Smelt. & Power Co. d	0.80	d1.76
Pierce-Arrow Motor Car Co.	6.68	d1.77
Hazeltine Corp.	0.54	d1.82
Amer. La France Foamite Corp.....	6.38	d1.87
Kresge Dept. Stores, Inc..... d	2.22	d1.95
Atlas Tack Corp.....	0.32	d2.00
Miller Rubber Co.	4.96	d2.15
Amer. Zinc, Lead & Smelt Co.....	0.22	d2.19
Williams Oil-O-Matic Heat Corp....	34.69	d2.30
Chicago Nipple Mfg. Co.	0.52	d2.31
Standard Plate Glass Co.....	2.13	d2.63
Reynolds Spring Co. d	2.67	d2.69

TABLE 22 CONCLUDED

	Earned on Invested Capital	
	1926	1927
White Motor Co.	4.41	d3.01
United Verde Extension Mng.....	1.89	d3.20
Emerson-Brantingham Co.	d0.02	d3.29
Chandler-Cleveland Motors Corp....	0.96	d3.32
Anglo-Chilean Consol. Nitrate Corp.	1.03	d3.79
Pittsburgh Terminal Coal Corp....	2.50	d3.91
Consolidated Distributors, Inc.....	2.21	d3.95
Phila. & Reading Coal & Iron Corp.	2.06	d4.68
Crex Carpet Co.	d0.82	d4.84
Dubilier Condenser & Radio Corp...	*2.19	*d5.12
Marland Oil Co.	12.82	d5.72
Penn. Coal & Coke Corp.....	0.17	d6.17
Hamilton Woolen Co.	d13.59	d8.88
Submarine Boat Corp.	d1.34	d9.75
Ipswich Mills	7.16	d9.92
Superior Oil Corp.	1.56	d10.43
Ajax Rubber Co., Inc.	d0.24	d12.90
Yellow Truck & Coach Mfg. Co....	2.56	d15.20
Pathé Exchange, Inc.	10.87	d15.34
Freshman (Chas.) Co., Inc.....	26.95	d31.05
Graham-Paige Motors Corp.	4.90	d35.40

* Partly Estimated.

d=Deficit.

CHAPTER VIII

THE PROPERTY ACCOUNT

THE two chief factors governing the size of a corporation's property account are precisely the same as those governing the size of total invested capital: (a) the normal requirements of the particular line of business in which the corporation is operating, and (b) the economic theory upon which the management of the corporation is basing its policies.

Leaving the varying requirements of different lines of business for later consideration, immediate attention may be directed to individual policies. Three of the outstanding aspects of managerial policy as applied to a specific concern can be aptly illustrated by drawing examples from the automobile industry.

(1). The type of policy which involves complete, or virtually complete, integration.

The Ford Motor Co. and the General Motors Corp. are the most highly integrated of the automobile producers, although the theory of integration differs considerably in the two cases.

The Ford company, in addition to the owner-

ship of plants and equipment for the production of practically all of the important parts of the Ford car, also controls virtually all of its essential raw materials—coal, lumber, iron, etc. It likewise owns establishments which perform certain intermediary manufacturing operations that most automobile producers have performed entirely outside their own organization, such as the manufacture of glass, steel, and textiles. The company also owns a small railroad.

General Motors is highly integrated as a manufacturer, but has made no effort to acquire control of its leading raw materials, nor of the numerous intermediary manufacturing operations which the Ford company controls. It manufactures not all, but nearly all, of the parts that go into General Motors cars, and is willing to leave to others the problems involved in the production of raw and semifinished materials.

But the difference in managerial policies is merely one of degree. The same ends are sought in both cases—the lowering of production costs, the protection of competitive position, and therewith an increase in aggregate net profits. The managements of these big concerns must hold the opinion that, over the long term, the maximum of commercial success will be achieved in direct ratio to the extent to which they them-

selves control the manufacture of everything that goes into their product.

Such a policy inevitably involves a relatively high property investment. And the property investment tends to increase all the more as control extends to raw materials, because a considerable proportion of raw material resources are always unused; this portion constitutes, in effect, a fixed inventory.

The ability to obtain the capital necessary to acquire the property that is needed does not enter into the situation, either in the cases of Ford and General Motors, or in those of other large and *successfully* integrated concerns in other lines.

It goes without saying that both Ford and General Motors could, at the present time, obtain all of the additional capital that they wished or needed, if they intimated to the investing public that they saw the opportunity to employ that capital profitably. So also could the United States Steel Corp., International Harvester Co., Firestone Tire & Rubber Co., Allied Chemical & Dye Corp., General Electric Co., and the leading Standard Oil units—to mention by name only a few of the large corporations in other lines of business which have attained a considerable degree of integration, and which at the same time have *profitably* exploited their large properties.

In such cases, where the conduct of the business has proved to be successful, the amount to be invested in property becomes sheerly a matter of executive judgment—a problem in business theory *as to the size of the property that will, over a period of time, yield the most satisfactory net return.*

(2) The middle-ground type of policy, which comprehends a rather high degree of manufacturing integration, but which consciously strives to hold property investment low.

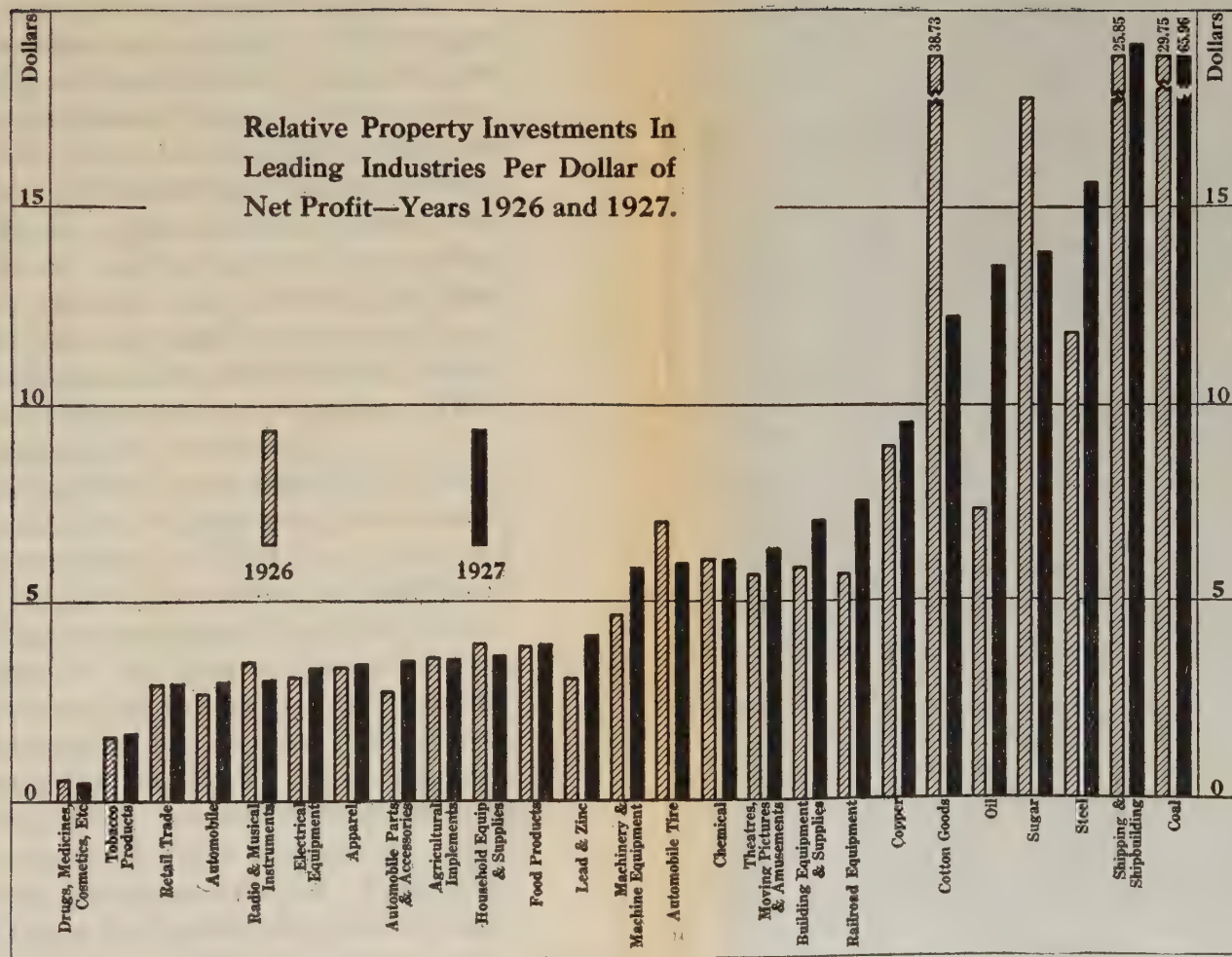
The Nash Motors Co. appears to have pursued this type of policy with more satisfactory results than any other automobile producer. Model specifications made public at the beginning of 1928 indicated that Nash was making all of the larger parts for its line of cars, such as engines, axles, bodies (through a body manufacturer controlled by Nash), etc., but was purchasing some or all of its requirements of such specialized smaller parts as speedometers, lubricating systems, ignition systems, clutches, carburetors, steering gears, radiators, wheels, etc. In other words, the makers of these smaller parts supplied the plants and equipment that was necessary for their production, and Nash's only investment was represented in the price that it paid for these products.

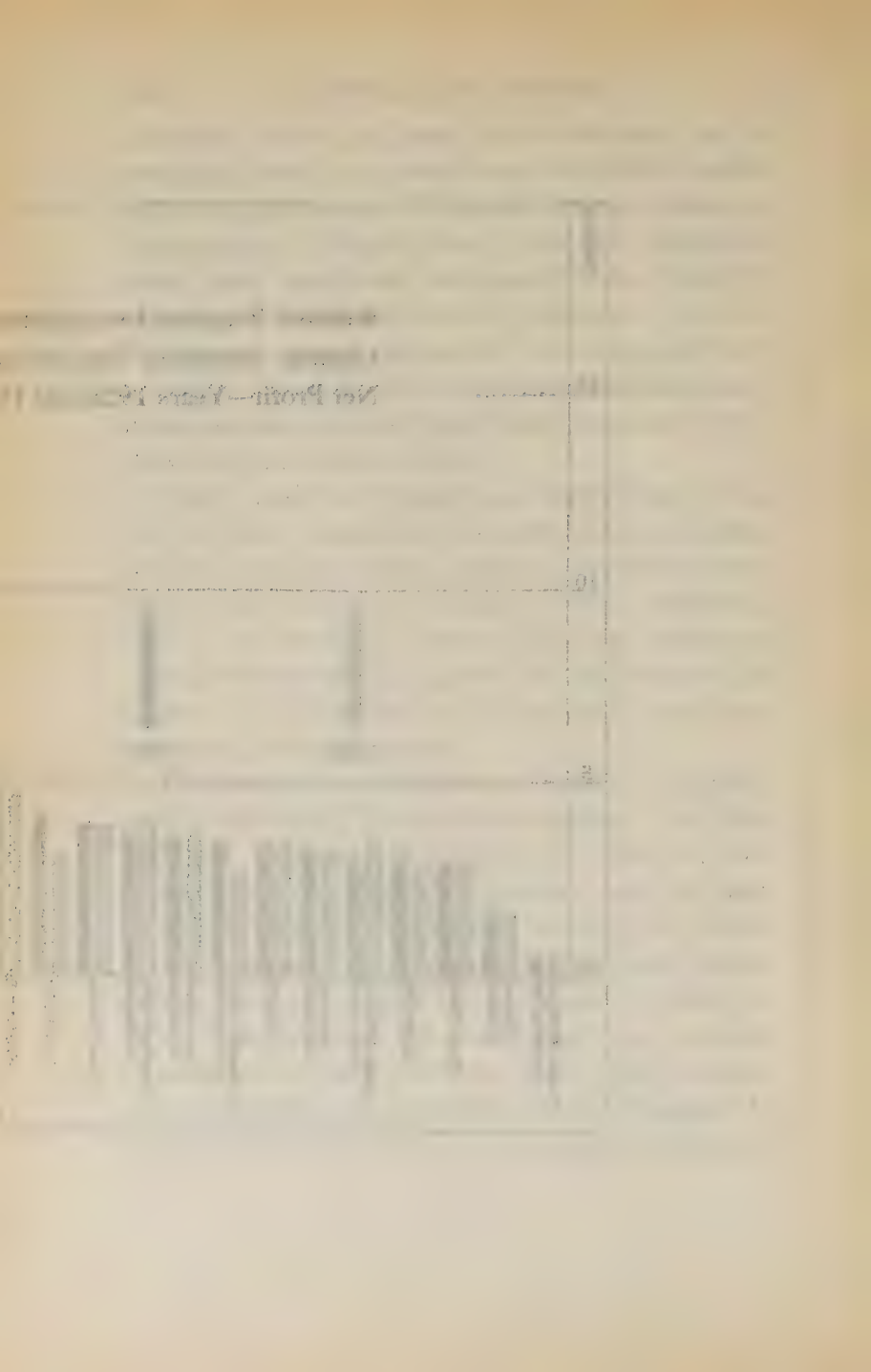
Not only that, but Nash seems to have con-

sistently striven to keep its investment in its own plants as low as was consistent with manufacturing efficiency. It is said that a visitor at the company's plants some time ago remarked upon their smallness, compared with those of other important automobile producers. Mr. C. W. Nash, upon hearing of this comment, remarked: "If in the future anyone criticizes our plants and equipment, send him to me and I will show him our bank balance."

Nash's cash and marketable securities at the end of 1927 amounted to some 42.3 millions, which was about 502 per cent of the stated balance sheet value of property (after depreciation). In contrast, General Motors' cash and marketable securities (some 208 millions at the close of 1927) amounted to about 61 per cent of stated property value.

There are two dangers involved in carrying a relatively small property investment: (a) that capacity will not be sufficient to care for demand if it should suddenly expand, and (b) that it might be found necessary to care for extensive additions and renewals on relatively short notice, thus obligating the corporation either to draw heavily upon its cash reserve or to raise capital in the open market. The latter contingency is easily met if cash reserves are large. It should be stated also that the long-term history





of Nash's profits pays an eloquent tribute to the manner in which this particular concern has carried out its policy of low plant investment.

(3) The extreme type of policy, which comprehends virtually no manufacturing integration, and which either consciously strives to hold plant investment down to the irreducible minimum, or which by force of circumstances is obliged to do so.

This is the line upon which the producers of what are known as "assembled" automobiles work. Such producers buy almost all of their parts—large parts and small—in the open market, confining themselves merely to the task of putting these purchased units together. Their plant investments are quite small.

Due to the fact that every essential part of an automobile can now be purchased from a well-established producer, and that most parts and accessories producers are willing to build products according to the automobile maker's specifications, there is no inherent reason why an assembled automobile cannot give fully as satisfactory a performance as one that is made by a highly integrated producer. It so happens, however, that in the automobile industry most producers of assembled cars have not won satisfactory profits during recent years. Three well-known producers in this field operated at a deficit in 1927.

In such cases, the *ability* to obtain capital for a larger plant investment is often of transcending importance. A greater degree of manufacturing integration, involving larger property investment, might be sought if the necessary capital could be procured. It cannot be procured, except upon onerous terms, unless a small-plant producer has been able to demonstrate the validity (from a profits standpoint) of his theory of operation.

The Drug Industry's Experience.—Contrasted with the lack of success by several automobile producers who have sought to operate with minimum property investments has been the conspicuous success of (to cite only one example at this time) the drug, medicine, and cosmetic producers.

The units in this latter named group are, oftentimes, no more than assemblers. They require a plant only large enough to mix and package their formulæ. Machine equipment is scant and obsolescence is slow. Production problems are simple; sales problems are all-engrossing.

Thus in Table 24, on pages 169-70, showing a selected list of concerns which earned the greatest amounts on their property valuations in 1927, the first 5 names at the top of the list are those of corporations operating in the drug, medicine, and cosmetic industry. In this instance,

the minimum property value theory has been a matter of choice rather than necessity, and has been completely validated by certain leading concerns. Perhaps one reason why it has been validated is because, not being obliged to apply large portions of capital or profits to original plant or renewals, such concerns have had all the greater margin to devote to selling efforts.

Many Compromises.—In between these three distinct theories of property investment there is a countless number of deviations and compromises, so far as the practices of individual corporations are concerned.

Depreciation policies, for example, enter into the problem. A concern which charges large sums to depreciation each year will, presumably, show larger earnings on its physical assets than will one which makes smaller depreciation charges. But rapid depreciation must be compensated for by the building up of some other type of assets.

Advertising policies are pertinent. Most banks and department stores possess finer buildings than they need for the efficient conduct of their business. But they thus advertise their *ability* to purchase such luxuries.

Managerial pride is often involved—and sometimes disastrously. One automobile company, for instance, is known to have refined its

production enormously a few years ago, but then found itself unable to increase its sales to compensate for the luxury of its new plant and equipment. It escaped the receiver, but only by a narrow margin.

Many concerns consciously carry an overcapacity so that they will be able to take care of peak loads in times of boom—when profits are customarily the largest.

When all is said and done, the problem of how much property a given corporation can afford revolves itself into the simple question of how much property, and what kind of property, will yield the most satisfactory return over a period of years.

Many business concerns which have found themselves overburdened with plant and equipment failed to see their problem clearly while they were striving for its solution.

TABLE 23

Property Accounts and Net Profits in Various Lines Compared

GROUP	No. of Cos.	Number of Dollars of Property Re- quired to Produce One Dollar of Net Profit	
		1926	1927
Drugs, Medicines, Cosmetics, etc...	9	\$0.55	\$0.48
Office & Business Equip. & Suppl's.	7	1.30	1.19
Shoes	4	2.18	1.68
Tobacco Products	17	1.60	1.69
Retail Trade	51	2.93	2.95

TABLE 23 CONCLUDED

GROUP	No. of Cos.	Number of Dollars of Property Re- quired to Produce One Dollar of Net Profit	
		1926	1927
Automobiles	24	2.71	2.99
Radio and Musical Instruments...	8	3.49	3.04
Electrical Equipment	6	3.10	3.34
Apparel	13	3.36	3.46
Automobile Parts & Accessories...	22	2.74	3.53
Agricultural Implements	7	3.61	3.56
Household Equipment & Supplies..	14	3.96	3.65
Miscellaneous Manufacturing	33	3.53	3.68
Food Products (other than meat)..	36	3.88	3.91
Lead and Zinc	7	3.09	4.15
Silk Goods	4	22.67	4.84
Machinery & Machine Equipment.	24	4.69	5.84
Automobile Tires	9	7.02	5.98
Chemicals (Industrial)	14	6.08	6.05
Theaters, Motion Pic., & Amuse....	14	5.70	6.34
Miscel. Mining & Smelting.....	14	6.99	7.01
Building Equipment & Supplies....	31	5.89	7.06
Railroad Equipment	13	5.72	7.55
Miscellaneous Services	14	9.47	8.09
Meat Packing	3	6.84	8.17
Copper	17	8.97	9.55
Cotton Goods	7	38.73	12.28
Oil	51	7.37	13.56
Paper	7	13.25	13.61
Sugar	13	17.83	13.91
Steel	22	11.87	15.64
Shipping and Shipbuilding	7	25.85	19.15
Leather	3	25.70	57.85
Woolen Goods	4	*	58.48
Coal	11	29.75	65.96
Fertilizers	3	17.05	*
AVERAGE—544 COMPANIES		6.11	6.96

* Operated at a deficit.

The Cost Measure.—We know of one large manufacturing establishment which is constantly computing the value of its investment in each division of its establishment by measuring the cost of the product of that division against the lowest obtainable market price for products of the same type. It has stern courage. In effect, it says to each of its department foremen: "We will need so many units of Product X during the next quarter. Make them for us if you can do so more cheaply than you can buy them in the open market. If you can buy them more cheaply than you can make them, close down your department and become a purchasing agent until you can get your costs down."

This company does not wait until it is completely beaten before it acknowledges its mistakes. It is a highly profitable concern.

There are no set rules, so far as the property account is concerned. *The only principle approaching a rule is the one which dictates that, before new units are added, a scientific study of existing and prospective costs should be made.*

But it is true, for obvious reasons, that on the average those concerns which are able *successfully* to conduct their enterprises on the smallest amount of property occupy the most secure positions in times of stress.

Property Accounts in Various Lines.—As was suggested earlier, and as is demonstrated by Table 23, to a certain extent the amount of property that a given concern must carry is beyond its control—it is dictated by the nature of the business in which that concern is engaged.

This table reports the amount of property required by the leading concerns in various lines of business, to bring in \$1 of net profit in 1926 and 1927.

On the average, 544 concerns in all lines required almost \$7 worth of property to bring in every \$1 of net profit in 1927. Most of the groups which required *less* than the average amount of property per \$1 of profit fall into the following broad classifications:

(1) Those which consciously strive to hold property at the irreducible minimum, and which for this and other reasons have been able to expend large sums in advertising trade-marked products;

(2) Those in which manufacturing integration has been efficiently developed to a high degree.

(3) Those which are not obliged to carry large reserves of unextracted raw materials.

(4) Those which were conspicuously prosperous in 1927, and which by the mere size of

profits were able to overcome the handicaps of relatively large property investments.

And these are the broad classifications into which fall those groups which required *more* than the average amount of property to bring in a unit of net profit:

(1) Producers of raw materials, or producers of finished goods which, to insure an adequate future supply of raw materials, control extensive raw material sources.

(2) Producers of bulky commodities, or of commodities requiring both plant capacity and machine equipment that is physically large in size (and therefore expensive to purchase).

(3) Producers in depressed lines.

Table 24 lists the 50 specific concerns, selected from our full list of 544, which required the smallest amount of property to bring in \$1 of net profit in 1927. It is more than a coincidence that, of this short list of 50, fully 30 concerns are operating in five lines of business: (1) DRUGS, MEDICINES, COSMETICS, ETC.; (2) HOUSEHOLD EQUIPMENT AND SUPPLIES; (3) RETAIL TRADE; (4) FOOD PRODUCTS; (5) TOBACCO PRODUCTS.

The list showing the individual concerns which required the greatest amount of property, relatively, reports mainly those which were, for one reason or another, suffering trade depression in

1927, and therefore is hardly pertinent to the immediate argument. For this reason it is omitted.

TABLE 24

**50 Concerns, Selected From Full List of 544, Which
Report Largest Earnings on Property Account**

COMPANY	No. of Dollars of Property Required to Produce One Dollar of Net Profit	
	1926	1927
Lambert Co.	\$0.12	\$0.07
Coty, Inc.	0.14	0.11
Forhan Co.	0.11	0.12
Vivaudou (V.), Inc.	0.06	0.15
Household Products, Inc.	0.17	0.16
Hart Schaffner & Marx	0.25	0.18
Nash Motors Co.	0.36	0.37
Oppenheim, Collins & Co.	0.49	0.38
Gabriel Snubber Mfg. Co.	0.35	0.39
American Tobacco Co.	0.42	0.40
Jewel Tea Co.	0.58	0.43
American Home Products Corp.	0.27	0.44
Maytag Co.	0.45	0.56
U. S. Hoffman Machinery Corp.	0.57	0.59
Burroughs Adding Machine Co.	0.74	0.61
Congress Cigar Co.	0.59	0.62
Coca-Cola Co.	0.72	0.66
Gillette Safety Razor Co.	0.73	0.69
Penney (J. C.) Co.	0.42	0.69
Eureka Vacuum Cleaner Co.	0.63	0.69
Hecla Mining Co.	0.50	0.70
Life Savers, Inc.	0.70	0.73
Reynolds Tobacco Co.	0.76	0.74
Hartman Corp.	0.52	0.75
Canada Dry Ginger Ale, Inc.	1.05	0.79

TABLE 24 CONCLUDED

COMPANY	No. of Dollars of Property Required to Produce One Dollar of Net Profit	
	1926	1927
Parke, Davis & Co.	0.82	0.80
Radio Corp. of America.....	2.70	0.82
National Cash Register Co.	0.90	0.84
Kuppenheimer (B.) & Co.	1.02	0.85
Great Atlantic & Pacific Stores.....	0.96	0.86
Evans Auto Loading Co.	1.16	0.87
Metro-Goldwyn Pictures Corp.	*0.87	*0.89
General Railway Signal Co.....	1.07	0.90
Bayuk Cigars, Inc.	1.18	0.90
Certo Corp.	1.04	0.90
Arnold-Constable Corp.	1.91	0.91
Timken Roller Bearing Co.	0.88	0.92
Consolidated Cigar Corp.	*0.69	0.94
Bon-Ami Co.	1.01	0.94
General Cigar Co., Inc.....	0.96	0.95
Ingersoll-Rand Co.	0.78	0.98
Vacuum Oil Co.	0.91	0.98
Lehn & Fink Products Co.	0.79	1.00
Liggett & Myers Tobacco Co.	1.07	1.04
Manhattan Shirt Co.	1.18	1.10
Chrysler Corp.	1.53	1.13
Borg & Beck Co.	1.24	1.12
Woolworth (F. W.) Co.	*1.32	*1.16
Postum Co., Inc.	0.54	1.22
Montgomery Ward & Co.....	1.85	1.23

* Fixed charges for this corporation were estimated.

CHAPTER IX

FUNDED DEBT AND FIXED CHARGES

THE funded debt of a corporation reports *how* that concern raised a portion of its capital, and its fixed charges report the *cost* of the money, or the *terms upon which* it was acquired.

Corporate earning power, when it is measured against funded debt, is usually reported in a computation which shows fixed charges "times earned" in a given year. The mathematical process is simple division—net profit before fixed charges divided by fixed charges.

To avoid confusion in the viewpoints of corporate management and of bondholders toward funded debt, these two angles of the problem will be considered separately. Attention will first be given to the corporation's phase of the problem.

The Corporation's Viewpoint

If there is any single word which summarizes a corporation's attitude toward its funded debt, that word is *expediency*—in its broader meaning. Decisions as to expediency rest upon many

external factors, but principally upon (a) necessity; (b) time; (c) demands of different lines of industry; and (d) individual situations.

It is not the custom for corporations to market their own securities; some of the utilities have built up distributing organizations, but even in this branch of business distribution still remains for the most part a banking rather than a corporation operating function. In the industrial field, it is most infrequent for an individual concern to undertake complete responsibility for the marketing of its own securities.

This is the banker's or underwriter's job. *And because it is his job, the banker more often than not has the final word to say as to what types of securities will be offered to the public, and the price basis upon which such offerings will be made.*

This is all quite proper. An individual who is seized with an attack of appendicitis does not consult the veterinary. He takes his problem to a specialist. The banker is a specialist in the distribution of securities. He tests the public's appetite and consumptive powers at any given time, measures the degree of risk attaching to the securities that are to be offered against average situations and long term experience, therewith arriving at a decision as to the *quantity* of bonds, preferred stock, or common stock that

shall be issued, and likewise as to whether the issue shall bear a 7, 6, or 5 per cent coupon, etc.

It is all a matter of reconciling necessity with current expediency. But the net result is that a corporation, especially when it is offering its securities to the public for the first time, often has the size of its funded debt determined for it by the bankers. It adopts the necessary course. Its own desires are somewhat beside the point.

And one may hazard the opinion that, in the great majority of cases, the bankers' decisions are wiser than those of the corporate management might have been. The banker has two reputations to maintain—his own and that of the concern whose securities he is going to offer to the public. His own reputation is judged in large measure by the division in the number of good and bad securities that he issues.

Issues Necessitated By Depression.—Necessity again plays a vital part in security issuance in times of stress. When a corporation finds itself in financial difficulties it takes the same course that an individual does when he suffers heavy financial reverses—it mortgages its property. It makes no difference whether the bonds issued under such circumstances are formally labeled "first mortgage" issues or debentures. Failure to pay interest upon any type of a bond usually

marks the final step toward reorganization or insolvency.

And this fact, indeed, constitutes the strongest safeguard which bondholders possess, and is at the same time the firmest check tending to hold industry's bonded indebtedness at a relatively low level. It likewise constitutes the great danger in funded debt. Preferred dividends may be held in abeyance for many years and, unless the situation is covered by some special charter provision, stockholders can do little about it. Some corporations have never paid a common dividend, and yet are still going serenely on about their business, with the management continuing to take out excellent salaries.

The bond, on the other hand, is an instrument surcharged with a heavy load of TNT. When promises are not met the bondholders can step in and seize the property. Often they do so. It is not the common desire of industry to avoid bond indebtedness entirely because, quite aside from the dictates of necessity, it is often both most convenient and most economical for a corporation to raise a certain amount of its capital in the bond market.

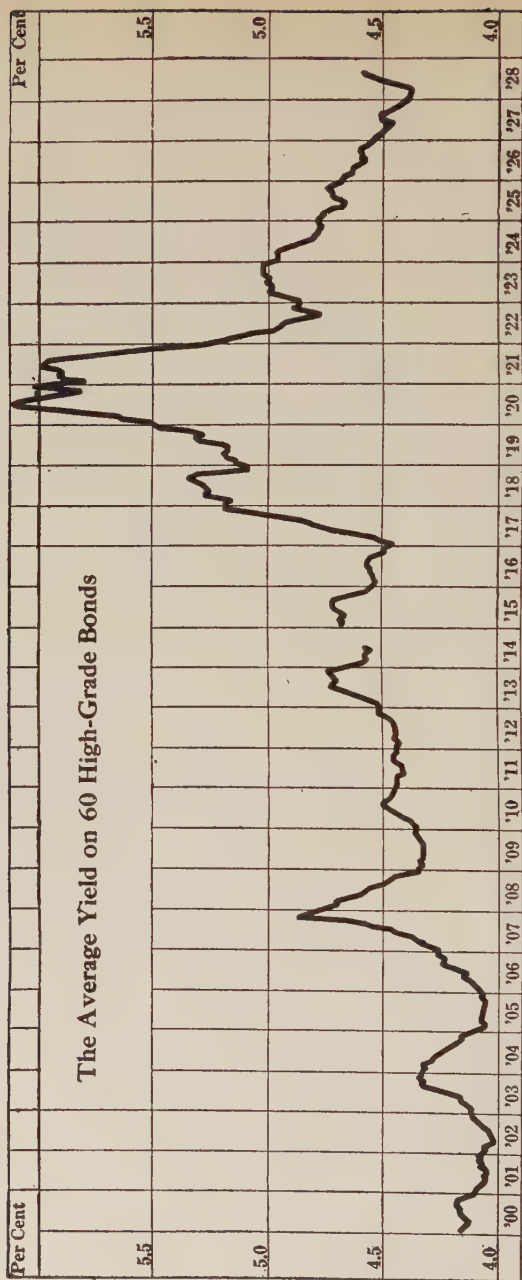
But it is true that WISE corporation managements inevitably strive to keep bond indebtedness within moderate proportions, and are constantly striving to reduce the size of such in-

debtedness. The common stockholders are the active and the real proprietors of a business, and it is a fact too obvious to call for comment that their equity is in inverse ratio to the volume of funded debt outstanding. It is equally obvious that the best and larger interests of common stockholders tend to increase in direct ratio, over a period of time, as funded debt decreases.

The Time Element.—Both voluntary and involuntary increases or decreases in the size of funded debt are, to a great extent, governed by the time element. As was pointed out immediately above, times of business depression frequently dictate involuntary increases in indebtedness. The conditions of both stock and bond markets at any given time dictate not only the *amounts* of various classes of securities that will be offered, but likewise the *terms* upon which they will be offered.

Where the offering of bonds is a voluntary one, the level of average prices in the bond market, as a whole—or the going average yield—is the factor with which shrewd corporation fiscal officers try to synchronize their issues.

As the accompanying chart reveals, the yield factor is a wide variant. A list of representative high grade industrial bonds which were selling on a 4.85 per cent basis in the latter part of 1916, sold to yield as high as 6.24 per cent in



mid-1920, and were back again to an average price from which they yielded 4.77 per cent, in the spring of 1928.

The price which corporations entering the bond market during the past 12 years had to pay for their money, therefore, has fluctuated within a 30 per cent zone. Quite clearly, then, enormous savings can be effected if corporate plans develop so that full advantage can be gained from periods of high bond prices, and so that new financing can be avoided entirely in periods of low bond prices.

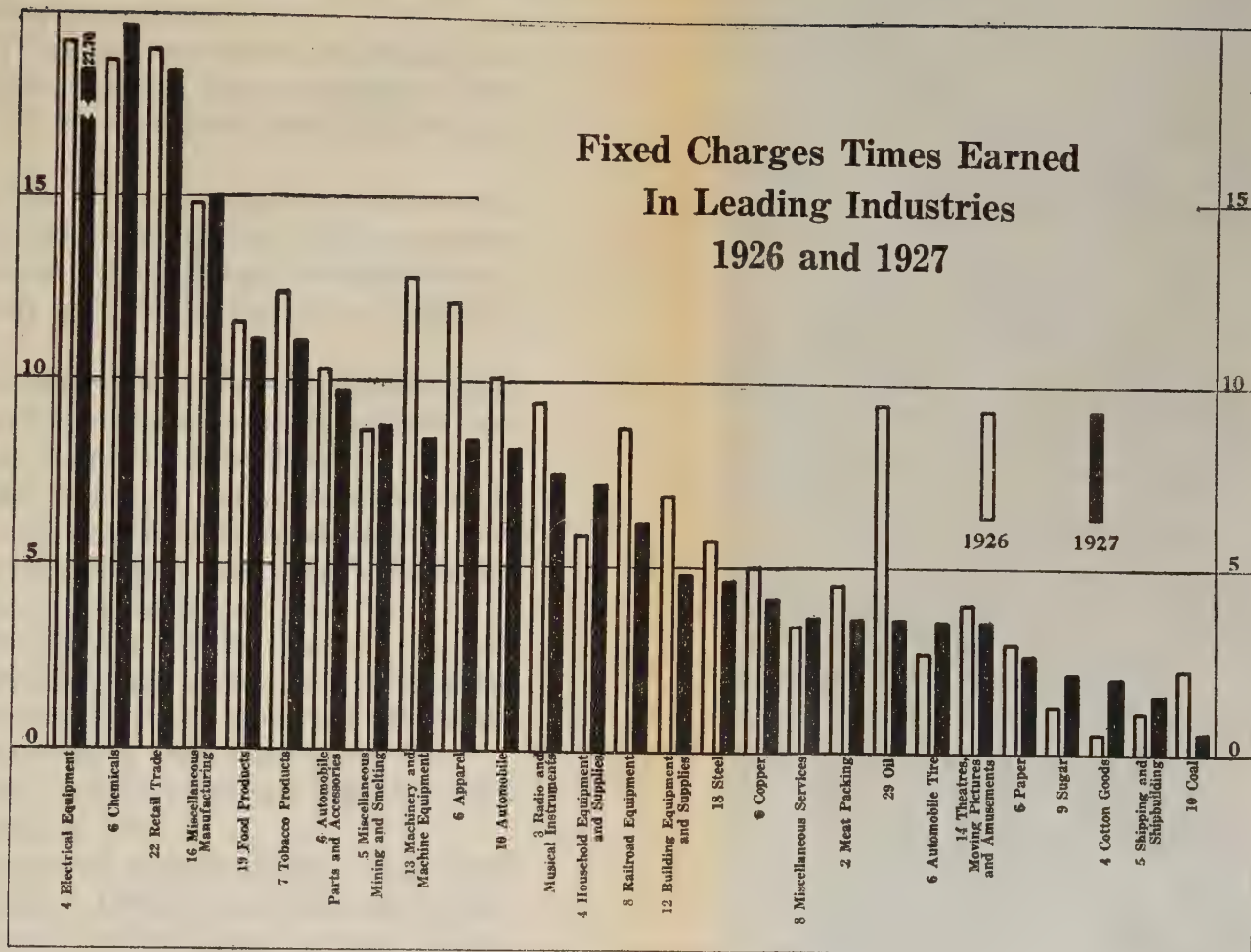
In the majority of cases necessity rather than choice is behind new bond financing operations in periods of low bond prices.

If good bonds sell on, say, a $6\frac{1}{4}$ per cent basis in 1920, and on a $4\frac{3}{4}$ per cent basis in 1928, why do not all corporations which have call provisions attached to their bond issues, and which offered their senior securities on a higher yield basis, refund on the lower basis when interest rates are low? It appears that, as a general proposition, a difference of fully 1 point in coupon rate must be attainable if refunding under such circumstances becomes really a cost saving program. A differential of much less than 1 point is almost wholly absorbed by necessary financing charges.

Demands of Different Lines of Industry.—As has already been pointed out, relatively large funded debts are necessitated in some lines, due to the nature of the services which those lines perform. This assertion is further verified by the tabulation following, which reports the number of times which leading companies in various lines earned their fixed charges in 1926 and 1927. This is merely another way, of course, of reporting the size of funded debt in relation to net profit.

Note, however, that in this table only those concerns on our full list which have a funded debt are included. In the earlier study of the aggregate distribution of net profit by industrial lines, all concerns on our full list were grouped according to industrial lines, regardless of whether they did or did not have a funded debt. The accompanying narrows the study considerably further, omitting entirely those concerns which have no funded debt.

We find that, on our full list of concerns, a total of 273 had funded debt of some size outstanding at the end of 1927, and at the same time rendered income accounts which made it possible to make an accurate computation as to the times fixed charges were earned in that year. It was found necessary to exclude about a dozen additional corporations which, although they



had a funded debt, did not report depreciation or depletion; exact computation of net profit was therefore impossible.

These 273 concerns for which comparable data were available earned their aggregate fixed charges 6.58 times in 1926, and 5.25 times in 1927.

The decline in times earned in 1927 as compared with 1926 was only to a small extent due to the increase in fixed charges during that year; for the most part, it was due to the decline in profits.

Those industrial lines, the leading concerns in which earned *less* than the average for their fixed charges, fall mainly in these classes:

(1) Lines requiring large investments in property, and especially those extractive lines which must carry heavy reserves of unextracted materials for future use;

(2) Lines which, at some time in the past, have experienced such severe trade depressions that heavy mortgaging of properties offered the only route of escape from insolvency;

(3) Those lines in which net profits in 1927 were abnormally low.

The lines which reported *greater* than average earnings for their fixed charges were, conversely, those in which large property investments are not normally required, which have

managed to raise their necessary funds mainly from sources other than the bond market, and which for one reason or another have found themselves abnormally prosperous during recent years.

Significance of the Average.—We direct especial attention to one unsatisfactory feature of the accompanying table reporting fixed charges times earned by different industrial groups. In some lines, the number of companies included is so small as to make the trustworthiness of the results highly questionable. These nonrepresentative cases have been included only to make the tabulation as complete as possible, and to disclose the basis upon which the average for the 273 companies combined was reached.

TABLE 25

**Number of Times Fixed Charges Were Earned in
1926 and 1927 by Corporations in Various
Lines of Business**

(This table omits from consideration those concerns on our full list which had no funded debt in 1927, and also those which rendered statements which would not permit of accurate computation of net profits.)

Number of Cos. Included		Fixed Charges Times Earned	
		1926	1927
(4)	Electrical Equipment	19.20	27.70
(6)	Chemicals (Industrial)	18.70	19.60
(22)	Retail Trade	19.00	18.40
(16)	Miscellaneous Manufacturing.	14.80	15.00

TABLE 25 CONCLUDED

Number of Cos. Included	Fixed Charges Times Earned	
	1926	1927
(19) Food Products (other than meat)	11.60	11.10
(7) Tobacco Products	12.40	11.10
(6) Automobile Parts & Acces....	11.30	9.71
(5) Miscell. Mining & Smelting...	8.69	8.82
(13) Machinery & Mach. Equip....	12.85	8.46
(6) Apparel	12.16	8.42
(10) Automobiles	10.11	8.20
(3) Radio & Musical Instruments	9.48	7.49
(4) Household Equip. & Supplies..	5.87	7.23
(8) Railroad Equipment	8.78	6.21
(12) Building Equip. & Supplies ..	6.93	4.82
(18) Steel (including U. S. Steel)..	5.75	4.68
(6) Copper	5.05	4.19
(8) Miscellaneous Service	3.42	3.67
(2) Meat Packing	4.54	3.64
(29) Oil	9.48	3.62
(6) Automobile Tires	2.70	3.56
(14) Theaters, Mov. Pic., & Amuse.	4.02	3.56
(6) Paper	3.00	2.67
(9) Sugar	1.31	2.18
(4) Cotton Goods	0.53	2.04
(5) Shipping and Shipbuilding	1.11	1.60
(10) Coal	2.28	0.57
Average, 273 companies with funded debt	6.58	5.25

This average figure we regard as possessing a considerable degree of significance. To point out that the average large industrial concern which was carrying a funded debt in 1927 earned its fixed charges 5.25 times in that year

is by no means to contend that every industrial concern, if its bonds are to receive a high investment rating, should have earned its fixed charges by such an excess. But the average figure *does show what actually occurred. Given this average, it is possible to examine individual situations, and to seek to explain or justify radical deviations.*

The Bondholder's Viewpoint

The bondholder's primary concern is that of obtaining the best return that is consistent with safety. Or at least that should be his primary concern. If return is uppermost in his mind and safety is secondary, he will find his most promising opportunities outside of the bond market. This has come to be such a generally recognized fact that it is a fair assumption that the greatest concern of bondholders as a group is safety, rather than return.

This being true, it logically follows that the bondholder's viewpoint is a common one with that of the corporation in some respects, but is directly at odds with that of the corporation in many other respects.

For example, the bondholder cares very little about the factors which dictate corporate policies in the issuance of certificates of funded debt. He

cares very little about the aggregate welfare of the *proprietors* of a business (the common stockholders) or about the prospect for an increase in their equities.

The bondholder is a lender, in the same sense that a bank which advances money for short-term purposes is a lender; he wants his money back when the corporation that has borrowed it has promised to repay; he wants his interest regularly while his money is in use. He wants the market value of his bonds to increase, rather than to decrease, and in that sense he demands a generally prosperous concern and realizes that his interests are closely allied with those of the proprietors. But above all else he wants safety, and if he is assured of this he is content to let most of the other factors in the case become wholly subordinated.

What is the statistical evidence that the safety which he demands is actual?

Earnings the Key.—Earnings are of course the most essential criterion. It is so patent that the bonds of an industrial company which earned its fixed charges 10 times in a given year are in a stronger position than the bonds of a company which earned its fixed charges $1\frac{1}{2}$ times, that the proposition is not even subject to debate. It is our opinion that *adequacy* of earn-

ings is always and eternally the *foremost* test of a given bond's investment position.

But the point that many bondholders overlook is the fact that *stability* of earnings is often almost as important as *adequacy*.

Take the United States Steel Corporation as an example. This company's total fixed charges, amounting to some 18 millions annually, are much larger than those of any other industrial concern in this country. Earnings on fixed charges (including subsidiary requirements) during the five-year period 1923-1927 ran as follows:

Year	Fixed Charges Times Earned
1927	5.9
1926	7.3
1925	5.8
1924	5.4
1923	6.5

Earnings of this size must assuredly be regarded as adequate. But it will be observed that they are not nearly so large, relative to fixed charges, as are the earnings of many other corporations which are listed in Tables 26 and 28, following. Yet the bonds of the United States Steel Corporation habitually sell on a lower yield basis than those of many other concerns which earn their fixed charges by a much wider margin. It is the stability of the Steel Cor-

poration's earnings, as well as the adequacy thereof, which determines their investment position.

Hence, in the investment market, while stability does not compensate for inadequate earnings, it does compensate to a certain extent for the fact that earnings are not conspicuously excessive. That is precisely why high grade bonds of railroad and utility corporations, the fixed charges of which are earned only 2 or 3 times in a given year, customarily sell on a lower yield basis than many excellent industrial bonds earning their charges from 5 to 10 times.

Asset Value.—The asset value behind a funded debt is worth only what it will bring at forced sale. To continue with the same example for a moment, the United States Steel Corporation valued its physical properties at 1.7 billions at the close of 1927. But no one fancies that the company could raise that amount of cash if it decided to liquidate. That is the estimated value of the property *of a going concern, operated by that concern itself*. It is not liquidating value—not anything like liquidating value. It of course means something to the owner of a bond if the property of a company is pledged as security for the principal of the loan. But such a mortgage does not mean as much as it is often assumed to mean. It usually means less to in-

dustrial bondholders than to the owners of the senior obligations of essential railroads and public utilities.

Current assets are sometimes of much greater value from the bondholder's standpoint than are fixed assets—no matter how great or pretentious those fixed assets may be. On relatively short notice, any corporation can turn the greater portion of its *current* assets into actual cash. After current liabilities have been subtracted, the remainder of this cash is theoretically available for bondholders. Thus for a period of time the bonds of an industrial concern that is earning at a low rate may sell on a relatively favorable yield basis, simply because the current asset position is strong.

But earnings tell the story in the long run. The owner of a bond which is showing adequate or stable earnings (preferably both) does not need to worry much about the asset position of the company which has issued that bond. But the owner of a high asset industrial bond for which earnings are persistently inadequate does have something to worry about. In all cases he should make earnings the prime test of safety.

And, of course, no bondowner can really follow the trend of earnings behind his issue unless he regularly receives *complete* income accounts and balance sheets.

Individual Variations.—Tables 26, 27, and 28, reporting individual situations in 1926 and 1927, require a brief explanation.

Table 26 lists the 50 concerns on our list of 273 which reported fixed charges earned the greatest number of times in 1927. The chief value of the table lies not in times earned figures themselves, which are preposterously high, but in the fact that the tabulation merely reports the concerns which have relatively the smallest fixed charges to be cared for. Total fixed charges of the 50 concerns combined amounted to 8.9 millions in 1927, or to 3.9 per cent of the combined fixed charges of the 273 concerns on the list here under study.

Table 27 reports two important facts: concerns which have relatively large fixed charges, and those which, for one reason or another, were not so prosperous in 1927. The fixed charges of these 50 concerns amounted to 65.2 millions, or 28.5 per cent of the total of the 273 concerns on our list.

Table 28 is the most significant of the group. Selection of the 50 corporations included in this tabulation has not been made on the basis of the size of earnings, but on the basis of the *size of funded debt*. These 50 concerns are the ones on our list which had the *largest* funded debts at the close of 1927. Their total fixed charges in that

year were 61 per cent of the fixed charges of the 273 concerns.

To make the significance of the figures in all of these tables more apparent, an extra column has been added in each case, showing the *amount* of fixed charges in 1927.

TABLE 26

50 Concerns on List of 273 Which Showed Largest Earnings, in Relation to Fixed Charges, in 1927

	—1926— Fixed Charges Times Earned	—1927— Fixed Charges (Million Dollars)	Fixed Charges Times Earned
General Baking Corp.....	*624.00	*0.01	*775.00
E. I. duPont deNemours & Co..	467.3	0.09	511.6
Kress (S. H.) & Co.....	*468.0	*0.01	*510.0
American Tobacco Co.	451.0	0.05	466.2
American Locomotive Co.	*268.3	0.03	*214.0
Woolworth (F. W.) Co.....	*157.7	*0.17	*208.9
General Electric Co.	107.1	0.28	175.3
Thompson (John R.) Co.	151.0	*0.01	154.0
Ingersoll-Rand Co.	158.6	0.05	132.0
American Metal Co., Ltd.....	134.0	0.02	126.5
Chrysler Corp.	62.8	0.19	103.6
Corn Products Refining Co....	100.4	0.12	100.3
Wrigley (Wm. Jr.) Co. ....	....	0.15	66.1
St. Joseph Lead Co.	59.7	0.07	58.6
Kennecott Copper Corp.	38.8	0.51	56.2
Real Silk Hosiery Mills, Inc....	73.0	0.01	55.0
International Nickel Co.	*40.7	*0.13	*47.7
Butler Bros.	*47.3	*0.06	*47.2
Cushman's Sons, Inc.	*39.7	*0.03	*47.0
General Outdoor Advg. Co.	*29.8	0.07	46.3

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TABLE 26 CONCLUDED

	—1926— Fixed Charges Times Earned	—1927— Fixed Charges (Million Dollars)	Fixed Charges Times Earned
Commercial Inv. Tr. Corp.	51.0	0.07	43.9
Curtiss Aero & Mot. Co.....	*21.5	*0.02	*43.5
Atlas Powder Co.	*239.0	*0.05	*41.8
Kresge (S. S.) Co.	41.3	0.36	39.8
Columbian Carbon Co.	*37.1	*0.05	*39.8
Pan. Amer. Pet. & Trans. Co....	33.6	0.45	38.6
Texas Corp.	*66.5	0.58	35.5
Loose Wiles Biscuit Co.....	....	*0.06	*32.8
Mack Trucks, Inc.	45.3	0.20	30.2
Stewart-Warner Spdmtr. Corp..	*23.2	0.18	*29.9
Royal Typewriter Co.....	*23.4	0.04	*29.3
U. S. Industr. Alcohol Co.....	14.2	0.08	28.0
Kuppenheimer (B.) & Co.....	24.3	0.03	26.7
Crucible Steel Co.	28.3	0.23	25.4
Foundation Co.	*51.5	*0.02	*25.0
American Wholesale Corp.....	*18.7	*0.06	*24.0
National Enamel & Stp. Co.....	16.3	0.03	23.3
Union Carb. & Carb. Corp.....	20.8	1.20	22.1
Purity Bakeries Corp.	14.5	0.15	21.7
Waldorf System, Inc.	*22.4	*0.05	*21.4
First Natl. Pict., Inc.....	*11.3	*0.06	*20.3
American Chicle Co.....	15.8	0.08	20.0
Firestone Tire & Rubber Co....	16.6	0.73	19.8
Franklin Simon & Co.....	*16.1	*0.07	*19.3
C. G. Spring & Bumper Co.....	*57.0	*0.02	*17.0
American Radiator Co.	27.5	0.73	16.7
Intertype Corp.	17.0	0.03	16.3
Jones & Laughlin Steel Corp...	18.8	0.75	16.0
Macy (R. H.) & Co.....	47.7	0.40	15.6
American Machine & Fdy. Co..	6.4	0.10	15.2

* Denotes fixed charges of this company were estimated.

Note: Where no figure appears for 1926 there was no funded debt in that year.

TABLE 27

**50 Concerns on List of 273 Which Showed Smallest
Earnings, in Relation to Fixed
Charges, in 1927**

	—1926— Fixed Charges Times Earned	—1927— Fixed Charges (Million Dollars)	Fixed Charges Times Earned
Botany Consol. Mills, Inc.....	....	1.15	0.18
Internat. Agricul. Corp.....	3.74	0.44	0.20
Louisiana Oil Ref. Corp.....	10.27	0.10	0.60
Elk Horn Coal Corp.....	1.94	0.45	0.64
Hoe (R. H.) & Co.....	2.20	0.40	0.65
Long Bell Lumber Corp.....	2.37	1.87	0.67
Continental Oil Co.	*101.60	0.51	0.73
Simms Petroleum Co.	14.55	0.24	0.75
Cuban Dom. Sug. Corp.....	0.01	2.50	1.06
Warner Bros. Pict., Inc.....	....	*0.34	*1.09
Amer. Ship & Com. Corp.....	0.59	0.47	1.09
Amer. Brown Bov. Elec.....	1.34	0.53	1.09
Gould Coupler Co.	1.83	0.29	1.14
Consolidation Coal Co.	1.39	1.78	1.21
Southern Dairies, Inc.....	3.14	0.52	1.21
Consolidated Textile Corp.....	0.20	0.88	1.24
Natl. Distil. Prod. Corp.....	0.52	0.25	1.24
Amer.-Hawaiian S. S. Co.....	....	0.08	1.25
Cuba Cane Sugar Corp.....	0.22	2.58	1.34
Motion Picture Cap. Corp.....	1.79	0.24	1.42
Walworth Co.	1.63	0.77	1.47
Pierce, Butler & P. Mfg. Co....	*5.79	*0.15	*1.53
Porto Rican Amer. Tob. Co....	2.07	0.50	1.56
American Woolen Co. ....	....	*1.05	1.57
Kelly-Springfield Tire Co.....	....	0.61	1.59
Atl. G. & W. Ind. S. S. Lines..	1.28	1.38	1.62
Durham Hosiery Mills	2.47	0.16	1.63
Sinclair Consol. Oil Corp.....	3.29	7.59	1.71
Remington Arms Co., Inc.....	*3.25	0.89	*1.72

FUNDED DEBT AND FIXED CHARGES 191

TABLE 27 CONCLUDED

	—1926— Fixed Charges Times Earned	—1927— Fixed Charges (Million Dollars)	Fixed Charges Times Earned
Manati Sugar Co.....	0.83	0.83	1.73
Rolls Royce of Amer., Inc.....	5.08	0.13	1.77
Beacon Oil Co.	6.26	0.45	1.78
Federated Metals Corp.	0.02	0.40	1.88
Bush Terminal Co.	1.86	1.48	1.97
Amer. Beet Sug. Co.....	....	0.47	1.98
U. S. Rubber Co.....	3.12	6.31	1.99
National Acme Co.	1.72	0.20	2.00
California Petrol. Corp.	10.87	1.27	2.04
Commercial Credit Co.....	1.51	1.66	2.10
Punta Alegre Sugar Co.....	1.09	1.00	2.16
International Salt Co.....	2.82	0.28	2.18
International Paper Co.....	2.08	4.86	2.18
Pacific Mills, Inc.	0.30	1.09	2.18
Cudahy Packing Co.	3.14	1.89	2.24
Bethlehem Steel Corp.	2.62	11.46	2.38
Niles-Bement-Pond Co.	2.38	0.10	2.40
Mengel Co.	2.35	0.36	2.42
Pressed Steel Car Co. ....	....	*0.38	*2.42
Stutz Mtr. Car Co. of Am.....	4.08	0.14	2.43
Colorado Fuel & Iron Co.....	2.52	1.72	2.50

* Denotes fixed charges of this company were estimated.

TABLE 28

50 Concerns on List of 273 Which Had Largest Fixed Charges in 1927

	—1926— Fixed Charges Times Earned	—1927— Fixed Charges (Million Dollars)	Fixed Charges Times Earned
Union Carb. & Carb. Corp.....	20.79	1.20	22.12
Liggett & Myers Tob. Co.....	11.14	1.72	11.90
Westghse. Elec. & Mfg. Co.....	8.24	1.50	11.43

TABLE 28 CONTINUED

	—1926— Fixed Charges Times Earned	—1927— Fixed Charges (Million Dollars)	Fixed Charges Times Earned
Union Oil Co. of Calif.....	11.03	1.18	9.52
Amer. Smelt. & Ref. Co.....	7.91	2.51	7.17
Nat. Dairy Prod. Corp.....	6.75	1.93	6.33
United States Steel Corp.....	7.32	18.07	5.86
Goodrich (B. F.) Co.....	2.70	2.93	5.40
Pure Oil Co.	15.72	1.24	4.90
Gulf Oil Corp. of Pa.....	9.84	3.83	4.58
Swift & Co.	*5.25	*3.62	*4.37
Phillips Petrol. Co.....	7.82	1.57	4.15
Republic Iron & Stl. Co.....	5.30	1.04	3.90
Humble Oil & Ref. Co.....	*14.75	2.66	3.67
Pillsbury Flour Mills	1.90	1.02	3.64
Metro-Goldwyn Pict., Inc.....	*4.12	*1.14	*3.59
Dodge Bros., Inc.....	6.65	3.80	3.54
Barnsdall Corp.	3.96	1.74	3.43
Tide Water Oil Co.	6.56	1.27	3.39
Atlantic Ref. Co.	7.69	0.98	3.37
Crown Willamette Pap. Co....	3.44	1.18	3.22
Loew's Inc.	3.28	3.24	3.08
Goodyear Tire & Rub. Co.....	2.15	6.45	3.04
American Sug. Ref. Co.....	4.52	1.80	2.99
Stand. Oil Co. of N. Y.....	12.07	5.74	2.98
Houston Oil Co. of Tex.....	2.81	1.33	2.83
Paramount-Fam.-Lasky Corp...	*2.60	*4.44	*2.82
Youngstown Sht. & Tube Co....	4.50	4.12	2.70
Lorillard (P.) & Co.....	4.38	1.63	2.53
Lambert Co.	1.84	2.00	2.50
Colorado F. & I. Co.....	2.52	1.72	2.50
Bethlehem Steel Corp.....	2.62	11.46	2.38
Cudahy Packing Co.....	3.14	1.89	2.24
Internat. Paper Co.....	2.08	4.86	2.18
Pacific Mills	0.30	1.09	2.18

TABLE 28 CONCLUDED

	—1926— Fixed Charges Times Earned	—1927— Fixed Charges (Million Dollars)	Fixed Charges Times Earned
Punta Alegre Sug. Co.....	1.09	1.00	2.16
Commercial Credit Co.	1.51	1.66	2.10
California Petrol. Corp.	10.87	1.27	2.04
U. S. Rubber Co.	3.12	6.31	1.99
Bush Terminal Co.	1.86	1.48	1.97
Remington Arms Co., Inc.....	*3.25	*0.89	*1.72
Sinclair Cons. Oil Corp.....	3.29	7.59	1.71
Atl. Gulf & W. I. S. S. Lines....	1.28	1.38	1.62
Amer. Woolen Co.	d	*1.05	*1.57
Cuba Cane Sug. Corp.....	0.22	2.58	1.34
Consolidated Tex. Corp.	0.20	0.88	1.24
Consolidation Coal Co.	1.39	1.78	1.21
Cuban Dom. Sugar Corp.....	0.00	2.50	1.06
Long Bell Lumber Corp.	2.37	1.87	0.67
Botany Cons. Mills, Inc.....	d	1.15	0.18

* Estimated. d=Deficit times earned.

CHAPTER X

CURRENT ASSETS—CURRENT LIABILITIES

A CORPORATION'S current assets minus its current liabilities equals its net working capital.

Its current assets divided by its current liabilities equals what accountants, for brevity, call its *current ratio*. Thus to report that the current ratio of Corporation X is, say, 4.21, is merely a short cut to the statement that the concern's current assets, at a given time, are 4.21 times as great as its current liabilities.

The current ratio constitutes one of the most common tests in daily use by bankers and business men for appraisal of the credit situation of a given company.

While not attempting to deny that the figure is a valuable tool in the analysis of financial statements, the accompanying study will demonstrate that it is at the same time one of the most dangerous of tools when it is carelessly used, capable of leading the analyst into gross error; and that in the majority of cases it comes to possess value only after the ratio itself has been

broken down into its component parts and each part studied separately.

The whole subject is such a broad one that the outstanding difficulty which presents itself is the attempt to present anything like a comprehensive analysis in the limited space here available. Hence this study will not pretend completeness. It will merely seek to deal with some of the broadest generalities and most significant principles attaching to the current asset-current liability relationship. Succeeding studies will deal somewhat more in detail with the principal items in the current assets and current liabilities sections of the balance sheet.

Chief Items.—At the outset, it will greatly simplify the discussion if we note the specific items which are reflected in the current ratio. In current assets there are three leading items, viz.:

(1) CASH AND EQUIVALENT, including bank balance, call loans, and marketable securities. Accrued interest due, cash value of insurance policies and numerous similar minor items are sometimes reported separately, but are often (perhaps quite properly) reported as a part of cash.

(2) ACCOUNTS RECEIVABLE, from whatever source.

(3) INVENTORIES, including finished goods, goods in process, and materials and supplies.

In the current liabilities section of the balance sheet the following two items, in point of size

and importance, are ordinarily much more significant than any others:

- (1) NOTES PAYABLE, to banks and all others.
- (2) ACCOUNTS PAYABLE, for whatever purpose.

Various current reserves and accruals, such as reserves for taxes, commissions, bad debts, etc., and accrued interest, dividends and wages, etc., sometimes bulk larger in the aggregate, but do not ordinarily bulk very large individually. Nor are they of great importance either in the aggregate or individually, due to the fact that they are mainly very short-term items, promptly absorbed.

It is a widely held theory that small current liabilities and large current assets constitute the infallible earmarks of a strong financial situation. To test this theory, we shall examine the case of hypothetical Corporation X, which we will assume reported, at the close of a given fiscal year, current liabilities of \$100,000, and current assets of \$1,000,000. Its current ratio is 10—much above the average, and presumably a figure which marks this concern as one of extreme financial strength.

Time Period.—At the very outset, it is necessary to distinguish between the time period covered in an income account and in a balance sheet. Whereas the annual income account reports results for a given fiscal year, the annual balance sheet merely reports conditions *as of the last day of this given fiscal year*. It reflects the full

year's operations, of course, but it is a mirror of fact which is subject to quick change. Fixed assets have remained roughly constant throughout the year, but both current assets and current liabilities have been rapidly shifting from week to week—sometimes from day to day. These shifts are dictated not only by seasonal conditions, but by general trade conditions.

Thus it is important at all times to keep in mind that the current items in a balance sheet reflect only a *current condition*. In part, at least, the significance of this current position can be determined only by comparison of the position upon corresponding dates in past years.

Meaning of Current Liabilities.—Corporation X's current liabilities, amounting to only \$100,000 as compared with current assets of \$1,000,000, give a surface signal which says that the company pays all its bills promptly, keeps itself out of debt, presumably has money in the bank, and generally conducts itself as an exemplary corporate citizen. In actuality, this may *or may not* be the case.

It is possible, indeed, that Corporation X's current liabilities may be very low because it is a depressed company rather than a highly prosperous one.

Its bank loans may be low or zero because it

can find no way in which to employ borrowed capital.

Its accounts payable may be low because its current purchases of raw materials are small or negligible.

Its reserves for taxes may be low because, having earned nothing in the previous year, its Federal income tax accruals are zero.

And its accrued wage obligations may be low because it is running at only a small fraction of capacity, and because it has been necessary to "lay off," say, 75 per cent of the normal working force.

Thus low current assets may be EITHER a signal of a fine financial condition or they may be the signal of real economic distress. Competent balance sheet analysis comprehends determination of reasons for specific situations.

Further, Corporation X's current liabilities a month prior to the date upon which it issued its annual balance sheet may have amounted to as much as, or even more than, its current assets. If so, it could have changed the situation radically by the sale of a block of bonds, which would make it possible to transfer a large portion of *current* liabilities into *fixed* liabilities. The current financial position might therewith have been improved, but the situation of the proprietors of the business (the common stockhold-

ers) might have been weakened by the new mortgage which it had been necessary to place ahead of their own claims.

Current Assets.—But still it remains true that, as of the date of the statement here under scrutiny, Corporation X's current ratio was 10, and that it was, *prima facie*, a good credit risk for a bank loan of, say, six-figure proportions. Let us examine three possible cases.

CASE 1 (CORPORATION X)

Cash and equivalent	\$500,000
Accounts receivable	250,000
Inventory	250,000

Total current assets	\$1,000,000
Current liabilities	\$100,000

In this case, of course, there is no room for doubt. The current ratio does reflect a strong financial condition, both relatively and actually. But now look at another distribution of current assets:

CASE 2 (CORPORATION X)

Cash and equivalent	\$200,000
Accounts receivable	400,000
Inventory	400,000

Total current assets	\$1,000,000
Current liabilities	\$100,000

The current ratio remains 10, but there is at least ground for the suspicion that some of Corporation X's receivables may be cancelling themselves a bit slowly, and that its inventory, in relation to its other current assets, may be a bit large. And certainly the cash position has become less satisfactory.

CASE 3 (CORPORATION X)

Cash and equivalent	\$10
Accounts receivable	499,990
Inventory	500,000
Total current assets	\$1,000,000
Current liabilities	\$100,000

The current ratio still remains 10, and, *prima facie*, Corporation X is in a fine financial position if it is judged solely upon the basis of this ratio report. Further, if commodity prices are rising, and if the company's customers are liquidating their indebtedness according to the usual practices in the trade, Corporation X, despite its low cash, its large inventories and its large receivables, may be in a reasonably strong financial position, and therewith a logical candidate for a substantial loan.

But if commodity prices are falling or perhaps even if commodity prices are stable, and if indebtedness is frozen or even if collections are merely slow, Corporation X, regardless of its

high current ratio, well may be in a dubious financial position, and a questionable candidate for further credit.

The very least that can be said is that the financial condition in Case 3 is not by any stretch of the imagination as strong as that reflected in Case 1, regardless of the identical ratios.

Thus to report that Corporation X's current ratio is 10 is to report not much of anything of importance. To report that Corporation X's current ratio is 10 AND TO STATE THE REASONS WHY IT IS 10, AS DISCLOSED BY CAREFUL ANALYSIS, is to report a fact that is quite essential to balance sheet analysis.

Current Ratios of Various Lines.—By the same sign, it would be more or less meaningless to report the composite current ratios of various lines of industry, at the end of 1926 and 1927, without an accompanying explanation. In Table 29, therefore, we have sought to convey, in general terms, some idea of *why* certain ratios stand in their respective positions. This editorial section of the table calls for some explanation.

In the four chapters immediately following it will be disclosed that, on the average and at the end of 1927, the relative amounts of aggregate current liabilities and the distribution of aggre-

gate current assets (for a large group of industrial concerns) ran roughly as follows:

Aggregate current liabilities were 7.61 per cent of aggregate *total* assets.

Aggregate inventories were not quite 50 per cent of aggregate current assets.

Aggregate cash was around 30 per cent of aggregate current assets.

Aggregate receivables were slightly more than 20 per cent of aggregate current assets.

Thus the editorial comment in Table 29, in all cases, states merely a *relative* situation. In asserting that a given industry's current liabilities are very large, we seek only to state that such liabilities, at the end of 1927, amounted to considerably more than 7.61 per cent of total assets—*i.e.*, that, relatively, current liabilities were considerably greater than the average for industry as a whole. Similarly, in each column of the tabular editorial analysis, the terms "very large," "large," "about average," "average," "small," and "very small," merely convey an idea of the *relative* positions of the particular item, for a given group, with reference to the grand average.

Extended discussion of the significance of Table 29 will be postponed until later, when such important items as current liabilities, inventories, cash, and receivables come up for closer

individual scrutiny. Here it is only pertinent to note that not all of the lines of industry which had relatively high aggregate current ratios at the end of 1927 were actually in strong financial positions and that by no means all of those which had relatively low current ratios were actually in weak positions.

Some Improvement in 1927.—The aggregate current ratios, however, being based upon upwards of 550 individual situations and tending to iron out the minor number of freak reports, we do regard as possessing some significance. These aggregates report that our large group of industrial concerns combined had a current ratio of 4.46 at the end of 1926, and of 4.58 at the end of 1927. They are significant:

(1) In so far as they report a fractional improvement in industry's financial position during 1927, and

(2) In so far as they provide at least a *starting point* from which radical deviations may be appraised.

The miscellaneous services group is included in Table 29 only to give completeness to the aggregate ratios. The companies operating in this group carry virtually no inventories, and in the cases of finance companies their receivables are unduly high. The current ratios in such cases are, therefore, nonrepresentative of industry as

TABLE 29
Current Ratios By Lines of Industry

No. of Cos.	GROUP—	Current Ratio		—Reasons for 1927 position on list—			
		1926	1927	Current Liabilities	Inventories	Cash	Accounts Receivable
7	Cotton Goods	9.57	10.23	Very small	Large	Small	About av.
14	Chemicals (Industrials)	7.76	8.38	Very small	Small	Very large	Small
6	Electrical Equipment	7.65	7.97	Average	Small	Very large	Average
6	Railroad Equipment	6.85	7.81	Very small	Very small	Very large	Average
17	Tobacco Products	8.05	7.55	Average	Very large	Small	Very small
24	Machinery & Mach. Equip.	5.72	7.18	About av.	Large	About av.	Very large
14	Household Equip. & Supplies	7.99	6.95	About av.	About av.	About av.	Large
7	Office & Business Equip. & Supplies	5.68	6.80	About av.	Very small	About av.	Very large
7	Agricultural Implements	5.78	6.75	About av.	Small	Small	Very large
33	Miscellaneous Manufacturing	5.80	6.41	Small	Small	Average	About av.
4	Shoes	5.42	5.74	Large	Average	Small	Large
22	Auto. Parts & Accessories	4.76	5.24	Average	Small	About av.	About av.
31	Building Equip. & Supplies	5.18	5.20	About av.	About av.	About av.	About av.
22	Steel	4.91	5.08	Small	Average	Average	About av.
13	Apparel	4.57	5.02	Large	About av.	Very small	Large
4	Woolen Goods	3.33	4.88	Large	Very large	Very small	Average
9	Automobile Tires	4.87	4.78	About av.	About av.	Small	About av.
3	Meat Packing	4.43	4.73	Large	About av.	Very small	About av.
14	Miscell. Mining & Smelt.	4.73	4.70	Average	About av.	About av.	Small
9	Drugs, Medicines, Cosmetics, etc.	5.01	4.70	About av.	Small	Large	Average

TABLE 29—CONCLUDED

17	Copper	4.69	4.63	Very small	About av.	Average	Very small
51	Oil	4.14	4.44	Small	About av.	About av.	About av.
51	Retail Trade	4.18	4.30	Large	About av.	Average	Small
4	Silk Goods	4.18	4.29	Very large	Large	Very small	About av.
36	Food Products	3.72	4.09	About av.	Small	Large	Small
8	Radio & Musical Instruments	4.63	3.90	Very large	Small	About av.	Large
24	Automobiles	3.31	3.38	Very large	About av.	Large	Small
13	Sugar	3.78	3.28	Large	About av.	Small	About av.
7	Paper	4.35	3.13	Small	Large	Small	About av.
3	Leather	3.24	3.12	Large	Very large	Very small	About av.
14	Theaters, Mov. Pic., & Amuse.	2.83	2.88	Large	Large	Small	About av.
7	Lead & Zinc	2.50	2.85	Very large	Very small	Very large	Very small
11	Coal	2.64	2.20	About av.	Average	About av.	Large
7	Shipping & Shipbuilding	1.61	1.87	Large	Very small	Very large	Large
3	Fertilizers	5.61	1.85	Very large	Average	Small	Large
14	Miscellaneous Services	1.38	1.32	Very large	————	Not representative	————
	Average, 544 companies	4.46	4.58				

a whole. In future consideration of the principal current assets and current liabilities items, such companies will be omitted.

Total and Current Assets Compared.—Table 30 gives a different point of view relative to current assets. It reports the percentage of *total* assets represented by *current* assets in various lines of business.

Broadly speaking, those lines of business which have the highest percentage of total assets in current assets are those which, because of the nature of the business in which they are engaged, (a) require relatively small property accounts, or which, (b) also because of the nature of their business, are required to carry large volumes of inventories or receivables. The precise reverse applies to those lines which normally require large properties or are able to operate with relatively small volumes of inventories and receivables.

Note that the names of virtually all of the raw material lines appear in the lower section of the table. The table, as a whole, will take on more meaning after later discussions of the chief individual items in the current assets and current liabilities accounts have been presented.

Individual Extremes.—We now come to the usual lists of individual extremes, which in view

TABLE 30

Percentage of Total Assets in Current Assets

GROUP	1926	1927
Shoes	66.5%	68.7%
Agricultural Implements	60.6	62.0
Silk Goods	62.3	61.4
Tobacco Products	60.6	61.3
Electrical Equipment	60.9	58.9
Office & Business Equip. & Supplies..	54.8	56.9
Radio and Musical Instruments	51.7	54.7
Meat Packing	55.1	54.1
Apparel	55.2	53.2
Woolen Goods	52.6	50.7
Machinery and Machine Equipment...	51.6	50.3
Household Equipment & Supplies.....	45.5	48.1
Retail Trade	48.5	48.5
Automobile Tires	49.0	48.2
Automobiles	43.9	44.0
Automobile Parts and Accessories.....	43.8	42.9
Cotton Goods	37.4	41.6
Drugs, Medicines, Cosmetics, etc.....	37.9	39.0
Railroad Equipment	41.1	38.8
Lead and Zinc	36.5	37.9
Food Products	35.5	36.6
Miscellaneous Manufacturing	37.6	35.4
Miscellaneous Mining and Smelting....	35.4	34.8
Leather	35.7	34.4
Building Equipment and Supplies.....	34.1	33.8
Chemicals (Industrial)	33.9	33.5
Sugar	32.8	33.2
Theaters, Moving Pictures, & Amuse...	32.2	32.6
Fertilizers	27.9	26.7
Oil	27.7	26.4
Steel	25.5	24.0
Miscellaneous Services	22.7	23.4

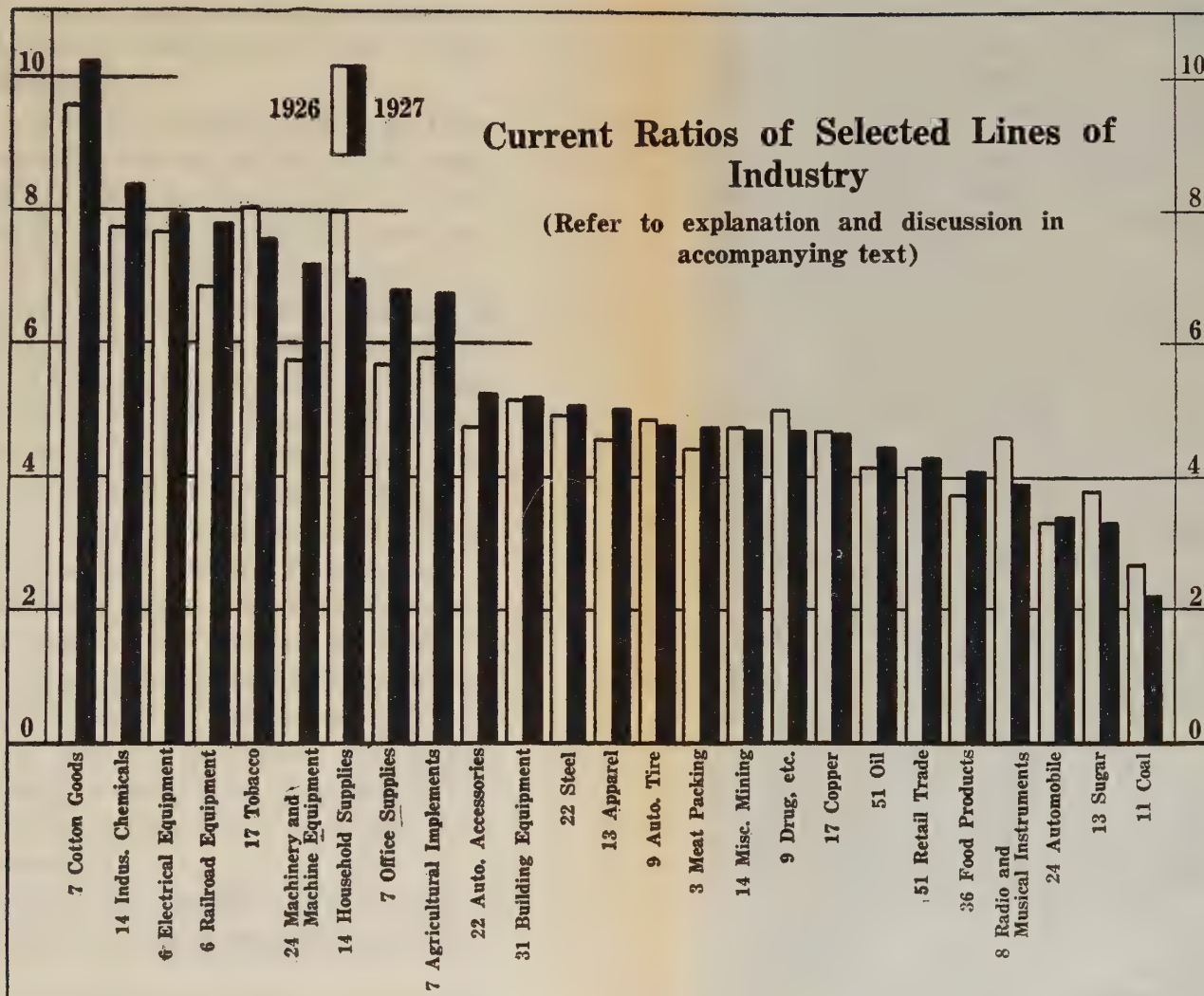
TABLE 30 CONCLUDED

GROUP	1926	1927
Shipping and Shipbuilding.....	16.9	21.2
Copper	20.3	19.9
Paper	18.1	16.4
Coal	14.9	15.3
Averages, 544 companies.....	35.2%	34.9%

of the preceding qualifications must be consulted with a considerable amount of care.

Our idea in presenting these two lists is, indeed, quite different from that which has dictated the presentation of similar lists of individual extremes in preceding studies. In this case, the primary purpose is not to provide a source of reference, but rather to further emphasize the premise that a current ratio, unless it is analyzed and explained, constitutes a highly dangerous figure to be used in balance sheet analysis.

It is true that the financial condition of the average concern in Table 31 (which reports the 50 concerns on our full list of 544 that had the highest current ratios at the end of 1927) was probably stronger than that of the average concern on Table 32 (which reports the 50 concerns on our full list that had the lowest ratios at the close of 1927). *But it is assuredly not true that ALL concerns listed in Table 31 enjoyed conspic-*





uously strong financial situations at the close of 1927, and it is EVEN LESS TRUE THAT ALL concerns in Table 32 issued 1927 balance sheets which were not satisfactory.

It is true that the average concern in Table 31 earned a greater amount on its invested capital in 1927 than did the average concern in Table 32. (Table 31 concerns earned 9.33 per cent, and Table 32 concerns earned 5.40 per cent.)

But it is not true that the average concern in Table 31 was, relative to the size of its current assets, greatly stronger in cash than the average concern in Table 32. And it is not true that inventories or receivables, in either case, were greatly out of line with the average situation.

The most important point of differentiation as between the two lists was the relative size of current liabilities. At the close of 1927, current liabilities of the average concern in Table 31 were only 2.32 per cent of total assets; current liabilities of the average concern in Table 32 were 17.21 per cent of total assets. But, as has been previously pointed out, abnormally low current liabilities may or may not bespeak a happy circumstance.

The following brief mathematical analysis summarizes the statements immediately preceding:

	% of Total Assets Rep. by Cur. Liabs.	Inventories	% of Current Assets in Cash	% of Current Assets in Receivables
Average concern in Table 31 (highest cur- rent ratios) ..	2.32	48.53	29.60	21.9
Grand average— all leading in- dustrials com- bined	7.61	49.10	30.01	22.3
Average concern in Table 32 (lowest cur- rent ratios) ..	17.21	40.49	30.00	28.8

The current ratio is not a useless figure, but a dangerous one—dangerous if it is used without analysis. Carefully studied, it becomes one of the most significant of balance sheet analytical devices.

The aggregate current ratio figures presented in the foregoing will be of little help to those who are seeking a short cut to balance sheet analysis. They provide only a starting point for study. Always, in using them, it should be borne in mind that the current ratio tends not only to vary radically from one company to another (and for widely different reasons), but that it likewise tends to vary greatly from one LINE OF INDUSTRY to another—depending upon the trade

practices that have become current in these different lines.

TABLE 31

50 Concerns, Selected From Full List, Which Had Highest Current Ratios

	Current Ratio	
	1926	1927
Belding-Heminway Co.	42.8	63.3
Lima Locomotive Works, Inc.	8.0	47.0
Mergenthaler Linotype Co.	32.1	44.8
Salt Creek Producers Ass'n, Inc.	30.4	43.8
Pacific Mills	36.6	42.6
American Tobacco Co.	44.4	41.6
U. S. Tobacco Co.	36.7	31.9
Emerson-Brantingham Co.	19.2	31.5
Callahan Zinc Lead Co.	25.0	28.5
White Rock Mineral Springs Co.	30.8	28.3
Hercules Powder Co.	30.5	27.8
South Porto Rico Sugar Co.	25.0	26.4
Coca-Cola Co.	11.7	25.2
American Locomotive Co.	12.7	23.9
Gillette Safety Razor Co.	10.2	23.7
Diamond Match Co.	28.5	22.8
American Typefounders Co.	12.8	22.6
Nipissing Mines Co., Ltd.	14.1	21.4
International Agricultural Corp.	17.7	21.4
Hollinger Cons. Gold Mines Co., Ltd....	12.8	20.8
Pyrene Mfg. Co.	8.3	20.5
Williams Oil-O-Matic Heat Corp.	7.0	20.5
Greene Cananea Copper Co.	13.1	19.6
Worthington Pump & Machinery Corp...	16.7	18.7
International Silver Co.	17.7	18.1
Beech-Nut Packing Co.	5.4	18.0
Electric Storage Battery Co.	11.4	17.8
Congoleum-Nairn, Inc.	15.7	16.7

CORPORATION PROFITS

TABLE 31 CONCLUDED

	Current 1926	Ratio 1927
Vanadium Corp. of America	13.9	16.7
Superior Steel Corp.	14.1	16.7
National Acme Co.	14.7	16.6
Van Raalte, Inc.	4.8	16.6
Marland Oil Co.	3.7	16.4
Ingersoll-Rand Co.	11.1	16.0
Woolworth (F. W.) Co.	11.5	15.5
Ohio Oil Co.	29.9	15.4
Celanese Corp. of America	8.4	15.3
Pepperell Mfg. Co. ....	....	15.2
U. S. Hoffmann Machinery Corp.	9.9	15.1
Lorillard (P.) & Co.	27.6	14.6
American Arch Co.	10.2	14.6
American Agricultural Chemical Co.	15.9	14.5
American Wholesale Corp.	12.9	14.1
Standard Oil Co. (Kansas)	9.7	14.1
Niles-Bement-Pond Co.	14.9	13.8
Cluett-Peabody Co., Inc.	16.6	13.6
Nichols & Shepard Co.	10.1	13.5
Air Reduction Co., Inc.	10.3	13.2
Naumkeag Steam Cotton Co.	10.9	13.1
Grand (F. & W.) Stores Co.	4.8	12.9

TABLE 32

**50 Concerns, Selected From Full List, Which Had
Lowest Current Ratios**

	Current 1926	Ratio 1927
Mexican Seaboard Oil Co.	0.60	0.12
Balaban & Katz Corp.	0.15	0.24
Producers & Refiners Corp.	0.38	0.27
Eastern Steamship Lines, Inc.	0.41	0.42
Compania Swift Internacional, S. A. C... ..	0.77	0.42
Anglo-Chilean Consolidated Nitrate Corp.	0.87	0.53

TABLE 32 CONTINUED

	Current Ratio	
	1926	1927
Houston Oil Co. of Texas.....	1.20	0.65
Childs Co.	0.85	0.68
American Ship & Commerce Corp.	1.04	0.97
Transcontinental Oil Co.	1.79	1.00
Fox Theatres Corp.	4.54	1.04
Waldorf System, Inc.	1.89	1.06
Penn. Coal & Coke Corp.	2.21	1.10
Warner Bros. Pictures, Inc.	1.35	1.11
Consolidated Laundries Corp.	2.56	1.14
Ipswich Mills	1.38	1.14
Submarine Boat Corp.	0.93	1.16
American Railway Express Co.	1.22	1.23
U. S. Distributing Corp.	1.25	1.24
Lehn & Fink Products Co.	4.48	1.27
Warren Bros. Co.	1.68	1.29
Barnsdall Corp.	3.95	1.35
Independent Oil & Gas Co.	0.75	1.37
Guantanamo Sugar Co.	1.45	1.37
Bowman Biltmore Hotels Corp.	1.13	1.48
Tidal Osage Oil Co.	2.68	1.50
U. S. Dairy Products Corp.	0.77	1.52
Bush Terminal Co.	1.27	1.52
Kelly-Springfield Tire Co.	1.56	1.53
National Dairy Products Corp.	1.64	1.53
American Beet Sugar Co.	1.26	1.54
Telautograph Corp.	1.00	1.57
Panhandle Producing & Refining Co.	1.15	1.63
Stutz Motor Car Co. of America	1.61	1.64
Loft, Inc.	1.81	1.64
Motion Picture Capital Corp.	1.97	1.66
Lehigh Valley Coal Co.	1.75	1.69
Wabasso Cotton Co., Ltd.	1.58	1.73
National Sugar Refining Co. of N. J.	5.37	1.77
Phila. & Reading Coal & Iron Corp.	2.98	1.78

TABLE 32 CONCLUDED

	Current Ratio	
	1926	1927
Standard Commercial Tobacco Co., Inc...	1.51	1.81
Nashawena Mills	1.60	1.84
Beacon Oil Co.	1.98	1.85
National Tea Co.	1.92	1.85
Consolidation Coal Co.	2.04	1.92
Electric Boat Co.	2.17	1.96
General Outdoor Advertising Co.	2.07	1.97
Manhattan Electrical Supply Co., Inc. ...	4.67	1.98
Madison Square Garden Corp.	1.50	1.98
Real Silk Hosiery Mills, Inc.	2.90	1.99

CHAPTER XI

INVENTORIES

INVENTORIES, more than any other single factor, assumed the obvious responsibility for the calamities which befell American business in 1920-1921. Overextension of credit was the basic cause of the depression of those years, but the *effects* reflected themselves most directly in the inventory account.

In good times and bad this item has always constituted one of the gravest business hazards, and it continues to constitute such a hazard to-day—despite the fact that business as a whole has radically revised its inventory policy since 1921, and is now, as nearly as it is humanly possible to be, on the well-known and widely heralded “hand-to-mouth” buying basis.

Regardless of the adoption of this revised policy, it was the inventory situation which was chiefly responsible for the automobile tire trade's grief as late as the spring of 1928; for the oil industry's distress in 1927, and to a lesser degree for the continuously unsatisfactory conditions during recent years in the various branches of

the textile manufacturing trade and in the apparel trade.

The fact that many observers either overlook or do not understand when they speak of the current hand-to-mouth buying policies of business, is that there is still a considerable number of big basic lines with which large inventories are entirely obligatory. There is no choice and no escape. The hazard is involuntary, and the consequences of falling prices, when they occur, are inevitable. Most important of the large inventory lines in a business community which as a whole has made revolutionary strides in revision of general inventory policy are:

TOBACCO PRODUCTS

TEXTILES

OIL

MEAT PACKING

SUGAR

AUTOMOBILE TIRES

RETAIL TRADE

APPAREL

FERTILIZERS

AGRICULTURAL IMPLEMENTS

MOTION PICTURE PRODUCTION (Qualifiedly).

In later paragraphs, we shall examine the varying degree of hazard which attaches to the

TABLE 33

Distribution of Current Assets of Various Lines

(Arranged on the basis of the percentage of current assets in inventories at the end of 1927, running from the highest percentage to the lowest.)

No. of Cos.	GROUP	Percentage of Current Assets in			
		—Inventories—		Accts. Receiv. Cash	
		1926	1927	1927	1927
16	Tobacco Products	70.8%	72.6%	12.6%	14.8%
3	Leather	70.2	67.4	27.0	5.6
4	Woolen Goods	63.5	66.1	*29.1	*11.4
4	Silk Goods	61.9	63.8	25.6	10.6
13	Theaters, Moving Pictures, and Amusements	60.3	62.9	18.7	18.4
7	Paper	55.9	59.5	19.6	20.9
6	Cotton Goods	53.3	59.0	26.6	14.4
47	Oil	55.9	57.6	20.7	*23.0
17	Copper	55.2	57.4	13.0	21.6
3	Meat Packing	52.9	55.7	33.0	11.3
13	Sugar	51.4	55.6	26.1	18.3
9	Automobile Tires	58.4	55.0	31.1	13.9
50	Retail Trade	52.6	52.9	17.9	29.4
13	Apparel	51.0	52.4	34.6	13.1
21	Steel	48.6	50.8	18.2	31.0
4	Shoes	47.1	47.5	34.8	17.7
10	Coal	32.2	47.4	*32.7	*24.5
22	Machinery & Machine Equip't	45.3	44.9	35.2	19.9
14	Miscellaneous Min'g & Smelt'g	45.8	44.6	14.3	41.1
3	Fertilizers	36.4	42.9	35.3	21.8
14	Household Equipment & Sup.	50.1	42.8	35.5	21.8
29	Building Equipm't & Supplies	42.0	42.2	29.1	*28.9
23	Automobiles	45.1	41.2	13.7	45.1
33	Miscellaneous Manufacturing	40.8	41.1	27.2	31.7
22	Automobile Parts and Acces..	40.9	39.5	18.5	42.0
36	Food Products	35.4	37.0	17.5	45.5
7	Agricultural Implements.....	43.3	36.4	46.4	17.2
6	Electrical Equipment.....	34.8	33.5	20.3	46.2
14	Chemicals (Industrial)	34.2	32.1	18.8	49.1
9	Drugs, Medicines, Cosm's, etc.	31.8	31.9	24.1	44.0
8	Radio & Musical Instruments	42.1	30.5	36.0	33.5
7	Office and Business Equip. & Supplies	32.5	28.8	*39.1	*32.2
7	Lead and Zinc	26.2	26.5	10.1	63.4
13	Railroad Equipment	22.0	20.9	24.0	55.1
5	Shipping and Shipbuilding....	13.1	10.4	*33.6	*58.7
Average, 513 Companies		49.0%	48.5%		

* Approximate.

GENERAL NOTE: Due to the fact that a number of concerns, because of the nature of their business, carry no inventories whatsoever, it was feasible to include only 513 companies in this tabulation, rather than our full list of 545.

characteristically different types of inventory carried. But, as a preface, it will be well to illustrate a few of the general principles involved.

Why Big Inventories Are Obligatory for Certain Lines

Meat Packing.—The experience of the meat-packing industry offers a workable example.

Every packer must carry relatively large inventories; that is one of the inescapable penalties of a business which gathers its raw materials whenever they become available, and which distributes its finished products at the dictates of consumer habits and whims. Unhappily, hens do not lay the maximum number of eggs at the precise time when the American people require the maximum number for consumption, nor do cows produce the maximum amount of milk as it is needed for butter and cheese, nor do farmers offer the maximum number of live animals at the time when the demand for meat is greatest. Moreover, there are some types of meat products which require from two weeks to two months before they are fully prepared for market.

Obviously, if packing-house products bring more than was expected when the raw materials were purchased, the packer's margin is widened,

and he increases his earnings. Obviously also, if the products bring less than was expected, the margin is narrowed and profits either fall or are turned into losses. The underlying facts as to the effects of price movements upon profits may be summarized briefly as follows:

(1) In a steadily rising market, the profits of the meat-packing industry increase rapidly. This is not necessarily due to the fact that the *margin* between the prices for raw materials and finished products widens, because it may often be that raw materials prices rise more rapidly than finished goods prices. The increase in profits arises chiefly from the increase in inventory values.

Such profits are largely *paper profits*; they are not the kind of profits that can be safely paid out in dividends, for the reason that, when inventories are sold, the funds received must be used to replace these inventories, on a constantly mounting price scale.

If, at the peak of a major rise in commodity prices, the packers could sell out their inventories entirely and withdraw from the market, they would be able to realize enormous actual profits. But it is patent they can do no such thing. They must supply the country with meats and produce day after day, regardless of

price trends; they must eternally be buying new goods to replace the ones that have been sold.

Likewise, if after a major rise commodity prices would remain at the peak level for a period of years, the packers would win real profits, and very large ones, as the result of such a movement. They would be able to market a large volume of inventories at greatly enhanced prices, and would be able to replace these inventories on a stable price level. But in the past, commodity prices have never stabilized at the peak of a major movement. Therefore:

(2) *A major decline in commodity prices inevitably wipes out a large portion of the book profits which were returned during the preceding price upswing.*

Hence the wise packer will set up adequate reserves, during a period of rising prices, to care for the losses which he knows must inevitably occur when prices recoil.

(3) Short-term price movements (week-to-week or month-to-month swings) have very little bearing upon either the long-term trend or the level of the packing industry's profits. These intermediate movements are expected, and are taken as a matter of course. And while they often influence immediate profits and sometimes result in actual losses over short periods of time,

the essential difference between the successful packer and the unsuccessful one is that the former's business organization is on such a basis that, during any given year, he can show a profit on the *majority* of trades regardless of intermediary price swings.

The problem would be much simpler for business as a whole to cope with if all commodity prices rose and fell together. But, of course, they do not. And during the past few years the tendency toward the development of price cycles peculiar to particular industries has become all the more accentuated. Note how not only this aspect of the general problem changes from one large inventory line to another, but also how other fundamental aspects of the problem likewise change.

Tobacco Products.—The great bulk of inventories of this industry are in raw materials, in the form of leaf tobacco which, before it is suitable for manufacture into cigars, cigarettes, etc., must undergo an aging and seasoning process running, in some cases, as long as three years. The tobacco manufacturers do not take each year's crop of leaf tobacco as it ripens in the fields, but being expert judges of the market, they time their buying operations in accordance with their opinions as to price probabilities.

But it still remains true that, over a period of

time, the tobacco manufacturing industry must take, at some price, virtually all of the domestic tobacco that is offered to them by domestic growers, and a sufficient quantity of foreign-grown product to care for their estimated future needs.

The volume of inventory carried is, therefore, always a large one. But the price hazard is relatively less than the size of the inventory itself, because (1) carrying long term supplies gives the opportunity to average out on normal price fluctuations, and (2) tobacco products, being almost wholly trade-marked and widely advertised brands, can rather easily be adjusted in price to correspond with important changes in the level of raw material costs.

Textiles.—The situation here, of course, varies from one individual textile line to another. But, broadly speaking, it may be said that during recent years the most prosperous textile concerns have been those which guessed the raw material markets most successfully and built up their inventories at the right time. Fluctuations in cotton and silk prices have been especially violent. Regardless of their desires in the matter, textile manufacturing managements are constantly obliged to bet in the raw material markets for their own protection.

The industry as a whole is generally over-

developed. This makes it impossible quickly to adjust finished goods prices to those of raw materials because there is usually a plethora of finished goods in the market. To time successfully the raw materials markets is one of the most important of the industry's problems.

Stocks of finished goods vary to some extent with seasonal conditions, and to some extent with managerial judgment of the price prospect. During recent years the main tendency has been to hold finished goods stocks down as low as possible.

Throughout the industry as a whole, inventories at all times constitute a serious hazard—chiefly for the reason that price fluctuations cover such a wide range and are quite beyond control.

Oil.—Inventories consist both of crude oil and of refined products. Without any qualification it is proper to state that the oil industry, as it is now organized, must and does take, at some price, virtually all of the oil that is offered for sale. There is no one else but the oil industry willing to take and carry the product.

Efforts to regulate this volume have thus far met mainly with failure. The only feasible point of regulation developed has been the price factor. When more crude oil is not desired at, say, \$2 per barrel, the price is dropped to \$1.50.

When more is not desired at \$1.50, the price is dropped to \$1.25, etc., etc. *But always, at some level, there is a price at which the oil industry as a whole is willing to bet—is obliged to bet.*

Here also the hazard is great. Naturally, it develops its most alarming aspects in times of general overproduction, such as in 1927.

But note the essential difference between the long term inventory position of the oil and textile industries.

The former is a wasting industry. Oil, once taken from the ground, can never be replaced. Some day—no one dares say when—the cheaply available oil resources of the earth will have been largely depleted. And with the arrival of that day, oil prices will have moved to a permanently higher level, and the oil industry's vast inventories will have won fabulous wealth for their owners.

But, on the other hand, with the proper use of fertilizer, there is no probability whatsoever of ever exhausting, say, cotton-growing resources. World production, which was around 26 million bales in 1927, might be 26, or 23, or 30 million bales in 1940. No one can say.

The point is that those lines of industry which must carry large inventories of raw goods produced by agriculture face a perennial inventory hazard. Those lines which carry large supplies

of minerals deal with a problem which runs in long term cycles, but which in some cases at least promises the hope of ultimate solution.

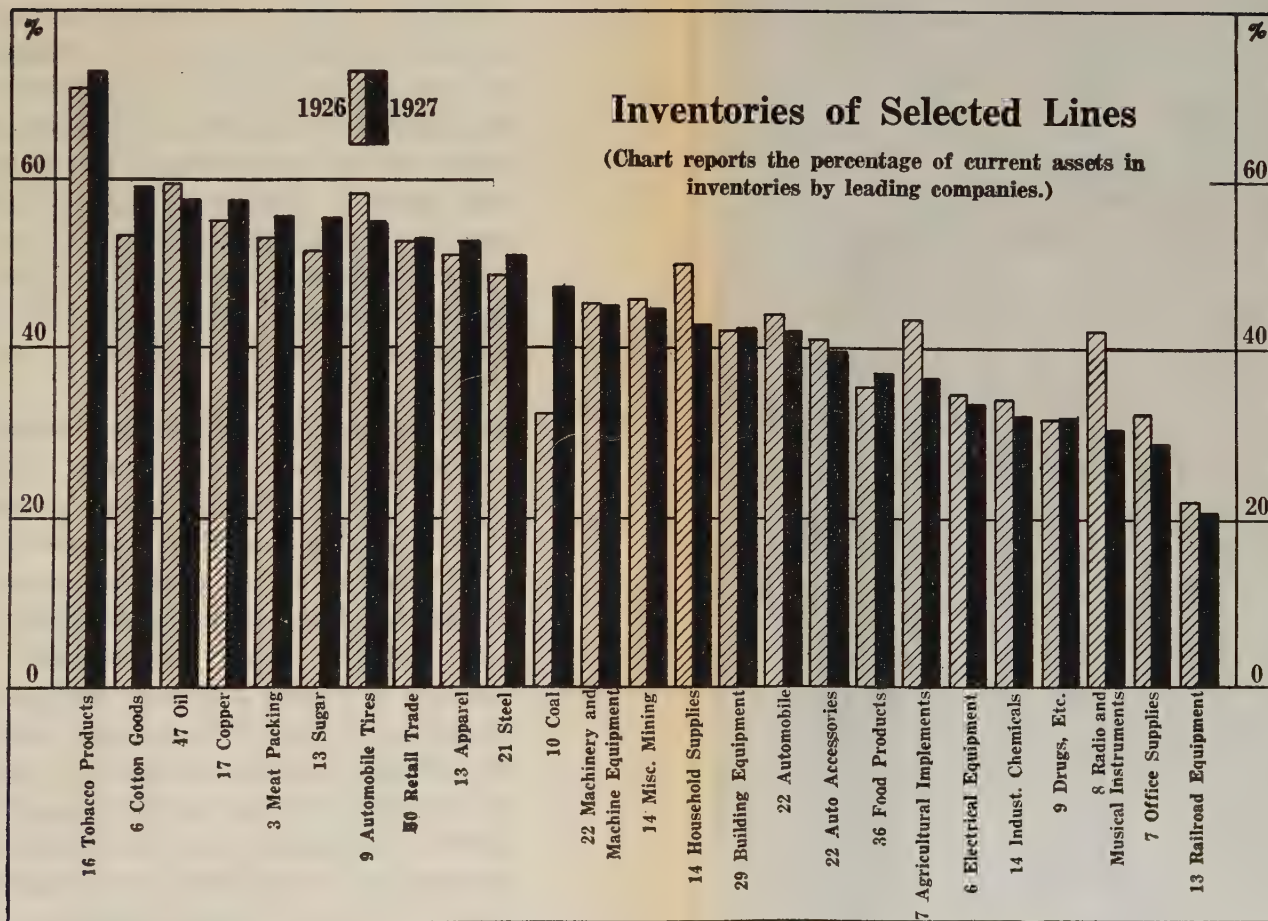
Sugar.—Here, of course, the problem, being directly related to agriculture, presents itself for solution year after year. Sugar growing is one of the few forms of agricultural activity which is prosecuted by corporations, rather than individuals, on a large scale. (Rubber, tea, coffee, and fruit growing are in the same class. In most other agricultural lines, small scale, individual effort is the predominant type of operation, and economic pressure usually dictates sale of the crop shortly after it has been made, regardless of the small scale operator's inclination to gamble on future prices.)

But corporate enterprise has larger financial facilities available than has small scale enterprise. It can, therefore, use a greater degree of judgment as to the time to sell. The sugar industry must perforce carry a certain volume of its crop for a number of months, for the obvious reason that there is no one else who is willing to carry it. But to *a certain extent* it can time its selling periods. Selections of the time to sell varying quantities of a given year's crop represent chiefly a forecast of the market's future behavior, and therefore constitute always a serious business hazard.

Automobile Tires.—Crude rubber, being an import commodity, moves to this country from all parts of the world, but chiefly from the British and Dutch colonies in the Far East. The geographical remoteness of the commodity's origin, therefore, makes it necessary for American tire producers to have at all times, either in their Akron warehouses, afloat, or contracted for in the Far East, a supply of crude rubber which will care for their manufacturing needs for a period of four months or more. Both in volume and in value this supply of raw material bulks very large.

At the same time, due to the strong seasonal tendencies in tire buying, it is necessary for the industry to carry, at certain periods of the year, large supplies of finished goods. Ordinarily, stocks of tires are being steadily built up throughout the winter and during the early spring—preparatory to the heavy summer consumer buying. If a radical change in crude material prices comes at a time when tire inventories are heavy, losses on finished goods also must be taken.

For a number of years past, inventories have constituted one of the tire industry's greatest sources of trouble. There was a serious decline in crude rubber prices in 1926, and another serious one in the spring of 1928, following an-



nouncement that the British Government's rubber growing restriction program was to be abandoned.

It is a fair assumption that, with crude rubber prices below 20 cents per pound at the end of 1928, as compared with around 40 cents at the beginning of the same year and 80 cents early in 1926, the hazard attaching to the tire industry's necessarily large inventories is today considerably less than at any time in, say, the past 5 years. *Over the next 5 years we should judge it probable that the trade's inventories would prove a source of profit more often than a source of loss.*

Retail Trade.—The situation in this line needs no discussion. There is no doubt whatsoever that the size of retail inventories has tended materially to decrease with the development of the chain store and with the flowering of the hand-to-mouth buying policy. And it is further true that retail trade prices fluctuate less violently than the wholesale prices of finished goods, and *much* less violently than the prices of raw materials. Except in periods of cataclysmic changes in general prices (usually dictated by nation-wide inflationary or deflationary credit policies), retail trade's inventories, although always large in actual volume, constitute a relatively minor price hazard.

Apparel.—Inventories are composed chiefly of cloth and of finished garments, and their sizes at any given time are mainly dictated by seasonal considerations. The apparel producers have to no small extent alleviated their inventory problem by forcing the textile producers to carry the goods. Stocks are sizable at certain seasons, but the hazard is not an especially great one.

Fertilizers.—Here again the predominating influence is for the most part a seasonal one. By February of each year, the fertilizer companies usually have built up, at their various warehouses throughout the country, somewhere around 60 per cent of a given year's estimated supply of fertilizer. The raw materials entering fertilizers are often subject to wide price variations. The inventory risk is perennially an important one.

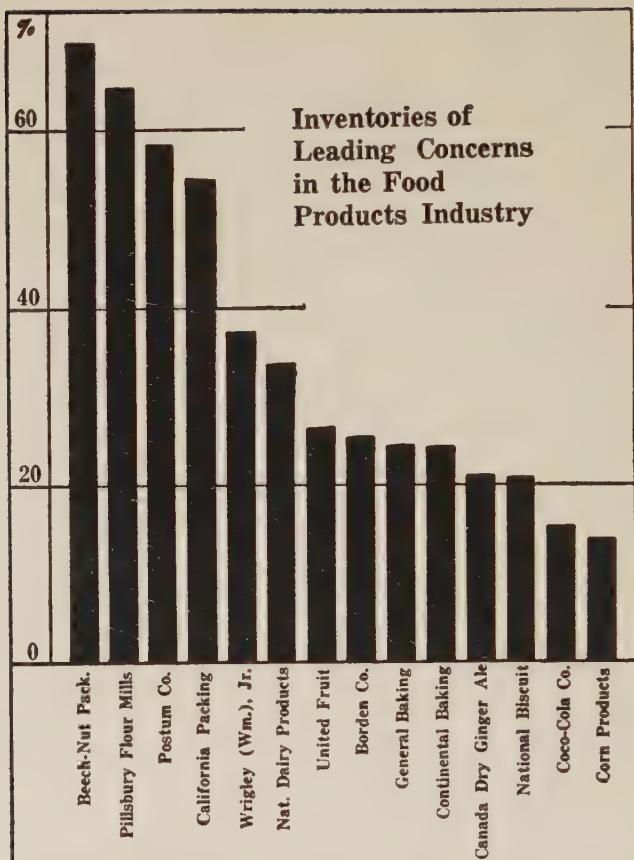
Agricultural Implements.—Stocks of raw materials are relatively small, but stocks of finished goods are comparatively large. A concern such as the International Harvester Co., with branch houses and distributing facilities in more than 250 cities throughout the world, must at all times have in stock, at these distributing points, the implements that agriculturists will be likely to demand during the planting, growing, and harvesting seasons. In times of grave depression

(such as 1920-1921) important losses on these inventories occur.

But in anything like normal circumstances, the hazard attached to carrying goods of this type is not a grave one. In the first place, the leading implement producers, being strongly financed, are not obliged to push their inventories for sale in a weak market. They can bide their time when buying power is laggard. In the second place, fluctuations in the prices of those raw materials which enter agricultural implements (mostly steel and wool) are not ordinarily radical, and are at the same time customarily slow to reflect themselves in the prices of finished goods.

It is interesting to note that in Table 33, reporting the *relative* sizes of inventories by industries, the agricultural implement trade appears near the bottom of the list. This is due to the fact that accounts receivable are also quite large, and that the size of this item tends to reduce the *relative* importance of inventories in the current assets account. *Actually*, both items bulk quite large.

Motion Pictures.—In one respect it might be said that the large inventories of the motion picture producing companies are not much more than a bookkeeping transaction. Completed films are carried as inventory. The most con-



Showing percentage of current assets in stocks of raw materials and finished goods at close of 1927. The chart emphasizes the fact that the size of inventories varies not only from line to line, but from one company to another within a single line.

servative current practice in the trade is to charge off 75 per cent or more of the cost of a film during the first year of its life, and the remainder by the end of the second year.

In this process there is nothing whatsoever comparable with the inventory problems of the lines of business which have been examined previously. Fluctuations in prices have virtually nothing to do with the film industry's inventory valuation. The real value of the inventory depends upon the success of the film itself, and has nothing to do with the price of the physical material of which it is made. It is a freak circumstance, which need not detain us further.

Summary of Inventory Situation.—(1) Despite the widely heralded development of hand-to-mouth inventory policies, there is still a considerable number of lines which have thus far found no escape from the large inventory policy.

(2) The hazards are greatest in those lines which are most closely associated with raw material production, and especially with the production of agricultural products which occasion a perennial inventory problem.

(3) The lines which have most successfully developed the low inventory policy during recent years are: (a) those which are always sure that they can purchase their raw materials in the open market when they need them and

which are willing to take their chances of being able to do so; (b) those which utilize relatively small quantities of raw materials, compared with the ultimate value of the product that they produce; (c) those which have been able to throw the bulk of the burden of inventories back upon the primary manufacturer or forward upon the dealer.

(4) In times of rapidly rising commodity prices, the large inventory lines of business stand to prosper more handsomely than other lines, just as they stand to lose more conspicuously in times of generally declining prices. And even the profits which accrue from rising prices do not endure forever; always in the past the price peak has finally been reached, and the subsequent decline has canceled the bulk of the paper profits that have been won. Thus, to repeat a premise presented earlier:

(5) *It must be true that it is a relatively stable level of commodity prices which works out the most beneficially for the average branch of business in the long run.*

Individual Variations.—Table 34 lists the 50 concerns on our list of 513 which had the greatest percentage of their current assets in inventories at the close of 1927, and Table 35 lists the 50 concerns which had the smallest percentage of current assets so employed.

In consulting these tables, it should be borne in mind that they are designed to set forth a *relative* situation—to show the size of inventories *relative* to total current assets. But in our preceding discussion of the current assets situation it became obvious that inventories might occupy a commanding position in the current assets item for one of two reasons: either because (a) the inventories themselves were actually large in volume or value, or because (b) the other two items in the current assets account (cash and receivables) were relatively small. The relative position itself is thoroughly important; obviously, an individual concern or a line of business which has its current assets weighted with inventories to an abnormally heavy degree will, to just that comparative extent, profit or lose by radical changes in the values of those inventories.

But as a further aid in consulting Tables 34 and 35 we have appended a third column in each case, detailing the actual dollar value of inventories at the end of 1927.

For the same reason we have appended two additional columns to Table 33 (which reports the relative sizes of inventories by lines of business); these two additional columns of data show the percentage of current assets that are also in accounts receivable and cash. They

supplement the text in explaining why **certain** lines take their respective positions in Table 33.

Broadly considered, we feel that Tables 34 and 35, detailing radical individual variations, convey the idea that is intended: viz, that of providing specific examples of the *types* of individual concerns which would be most or least vitally affected by radical changes in commodity values. Note that in Table 35 appear the names of a number of concerns the nature of whose business is such that they carry virtually no inventories.

In passing, it is interesting to observe that the aggregate inventories of the 50 concerns in Table 34 were valued at 1,013 millions at the end of 1927, while the aggregate of the 50 concerns listed in Table 35 was valued at only 78 millions.

Are Current Inventories Conservative?—We feel justified in assuming that, for American industry as a whole, the inventory situation at the present moment (early 1929) is not greatly different from what it was at the close of 1927. Neither the course of general prices, the volume of business in the aggregate, nor the buying habits of the consuming public has dictated any important change. The question, then, is whether the inventory position of industry as a whole is conservative or otherwise.

(Continued on page 238)

TABLE 34

**50 Companies, Selected from List of 513, With
Largest Percentage of Current Assets
in Inventories**

	% of Cur. Assets in Inventories		Value of Inventories (Million \$)
	1926	1927	1927
Consolidated Distributors, Inc. . . .	93.5%	96.0%	0.96
Metro-Goldwyn Pictures Corp. . . .	89.2	93.0	22.86
Butte Copper & Zinc Co.	86.7	90.9	0.10
Ohio Oil Co.	85.7	89.4	34.24
Kinney (G. R.) Co., Inc.	90.2	88.2	6.21
Central Aguirre Sugar Co.	85.6	87.2	4.09
Chandler-Cleveland Motors Corp..	84.6	87.1	3.23
Metropolitan Chain Stores, Inc....	85.8	85.4	2.23
Kroger Grocery and Baking Co....	88.5	84.1	12.25
Fajardo Sugar Co. of Porto Rico...	56.7	84.1	3.23
Universal Pictures Co., Inc.	80.7	83.9	10.65
Pender (David) Grocery Co.	86.0	83.7	1.59
Dubilier Condenser & Radio Corp..	58.7	83.2	0.74
Fox Film Corp.	83.5	82.3	14.37
Great Western Sugar Co.	85.9	82.3	42.45
Anglo-Chilean Consol. Nit. Corp..	83.8	81.6	9.64
National Tea Co.	86.6	81.5	7.44
Mengel Co.	78.9	81.3	6.34
McCrary Stores Corp.	55.7	79.9	6.27
Reynolds (R. J.) Tobacco Co.	77.2	79.8	108.77
Savage Arms Corp.	74.7	79.3	2.10
Prairie Oil and Gas Co.	77.8	79.1	91.02
Lorillard (P.) & Co.	66.5	78.5	51.68
Penney (J. C.) Co.	63.6	78.3	28.00
Jones Bros. Tea Co., Inc.	88.0	78.0	3.26
Warner Bros. Pictures, Inc.	82.6	77.7	6.19
Bayuk Cigars, Inc.	74.5	77.6	8.68
Loew's, Inc.	70.0	77.5	22.94
Illinois Pacific Glass Corp.	56.8	77.3	1.46

CORPORATION PROFITS

TABLE 34 CONCLUDED

	% of Cur. Assets in Inventories		Value of Inventories (Million \$)
	1926	1927	1927
Granby Consol. Mining, Smelting &			
Pwr. Co.	66.7%	77.1%	2.69
American Tobacco Co.	74.5	77.0	85.82
Nevada Consol. Copper Co.	78.9	77.0	18.13
Libby, McNeill & Libby, Inc.	76.5	76.5	29.00
Cuban Dominican Sugar Co.	56.0	76.3	15.62
Pierce-Arrow Motor Car Co.	75.7	76.1	9.85
Utah Copper Co.	82.0	75.9	15.28
Crex Carpet Co.	71.6	75.8	0.72
Liggett & Myers Tobacco Co.	75.4	75.7	95.89
National Acme Co.	71.1	74.1	3.44
Atlas Tack Corp.	77.2	74.0	0.77
Consolidated Cigar Corp.	69.6	73.9	14.73
Loft, Inc.	77.6	73.5	1.00
Simms Petroleum Co.	32.2	73.4	4.02
General Cigar Co., Inc.	75.4	73.2	15.70
Congress Cigar Co., Inc.	71.7	73.2	8.15
Durham Hosiery Mills	84.9	72.6	1.59
Belding-Heminway Co.	66.1	71.9	6.37
Peoples Drug Stores, Inc.	71.1	71.8	1.12
American Rolling Mill Co.	64.3	71.7	13.56
Standard Oil Co. of New York....	66.8	71.7	156.73

TABLE 35

**50 Companies, Selected from List of 513, With
Smallest Percentage of Current Assets
in Inventories**

	% of Cur. Assets in Inventories		Value of Inventories (Million \$)
	1926	1927	1927
Stanley Co. of America	0.37%	0.14%	0.01
Madison Square Garden Corp. ..	1.33	0.91	0.01
American-Hawaiian S. S. Co....	2.47	0.99	0.03

TABLE 35 CONTINUED

	% of Cur. Assets in Inventories		Value of Inventories (Million \$)
	1926	1927	1927
Great Lakes Dredge & Dock Co..	4.30%	3.12%	0.20
United Verde Extension Mining Co.	3.84	3.80	0.25
Hollander (A.) & Son, Inc.	6.25	4.31	0.06
Mexican Seaboard Oil Co.	3.90	5.00	0.02
Atlantic, Gulf & West Indies S. S. Lines	7.13	5.09	0.33
Butte & Superior Mining Co. ..	5.45	5.26	0.09
American Ship Building Co.	10.58	5.95	0.65
American-La France & Foamite Corp.	50.91	4.56	3.96
Hollinger Con. Gold Mines, Ltd.	7.13	4.59	0.64
Island Creek Coal Co.	6.24	6.68	0.61
Park-Utah Consol. Mines Co. ...	10.16	6.92	0.22
Shubert Theatre Corp.	13.03	6.97	0.56
American Arch Co.	10.61	7.53	0.57
Union Tank Car Co.	6.38	8.04	0.64
Warren Bros. Co.	8.76	8.38	0.54
White Rock Mineral Springs Co.	11.89	8.63	0.17
Telautograph Corp.	14.29	9.09	0.01
Shattuck (F. G.) Co.	47.48	10.28	0.41
Pittsburgh Terminal Coal Corp.	8.26	11.11	0.22
Life Savers, Inc.	25.20	11.33	0.28
Dome Mines, Ltd.	16.67	11.35	0.27
Hecla Mining Co.	14.94	11.58	0.22
Gabriel Snubber Mfg. Co.	20.35	11.79	0.23
Thompson (J. R.) Co.	16.03	12.02	0.22
American Locomotive Co.	14.25	12.10	6.11
Spear and Co.	14.93	12.66	1.69
Homestake Mining Co.	17.18	13.47	0.61
Corn Products Refining Co. ...	12.50	13.95	7.98
Howe Sound Co.	20.13	14.37	0.74

CORPORATION PROFITS

TABLE 35 CONCLUDED

	% of Cur. Assets in Inventories		Value of Inventories (Million \$)
	1926	1927	1927
U. S. Cast Iron Pipe & Foundry Co.	19.08%	14.41%	2.90
Lima Locomotive Works, Inc. . .	13.74	14.47	1.02
Baldwin Locomotive Works	16.33	14.64	3.94
Radio Corp. of America	52.76	14.68	4.90
Foundation Co.	10.40	14.83	0.55
Air Reduction Co., Inc.	17.42	14.89	1.38
South Porto Rico Sugar Co.	24.24	14.95	1.74
Household Products, Inc.	22.93	15.20	0.57
American Ice Co.	42.86	15.31	1.08
Coca-Cola Co.	21.12	15.32	3.12
Ford Motor Co. of Canada, Ltd. .	28.09	16.87	18.08
Teck-Hughes Gold Mines, Ltd. .	11.04	16.45	0.25
New York Air Brake Co.	18.15	16.50	1.17
Celotex Co.	14.85	16.94	0.41
U. S. Dairy Products Corp.	16.92	17.62	0.40
Intercontinental Rubber Co. ...	15.79	17.98	0.57
Illinois Brick Co.	18.25	18.14	0.74
Fleischmann Co.	21.44	18.21	6.44

Obviously, data for only two years do not offer the basis for an unqualified opinion in this respect. But there are certain possible computations, even from these short-term data, which throw light upon the query.

As has already been seen, inventories at the close of 1927 amounted to roughly 50 per cent of current assets, and to about 17 per cent of total assets. The change as compared with the year previous was relatively slight. Specifically,

inventories of the 513 large concerns which it was found feasible to compare as to inventories, amounted to 48.5 per cent of current assets at the close of 1927, and to 49.0 per cent at the close of 1926.

We find, moreover, that the inventories of these 513 companies were only 160 per cent of cash at the end of 1927 (*i.e.*, 1.6 times as great as cash) and were at the same time only 224 per cent of 1927 net profit. These figures mean:

(a) That without borrowing an additional cent from the banks, business could finance a considerable further purchase of goods out of its cash account; and

(b) That if overnight the value of the inventory account should decline to zero—a preposterous assumption—the deficit so incurred would amount only to slightly more than 2 years' net profit at the 1927 rate. A 25 per cent shrinkage in inventory values, such as occurs only in times of the most extraordinary economic distress, would be equivalent to only about 6 months' net profit.

Inventories and Gross Business.—But the real test is in the comparison of inventory values with the gross volume of business being transacted. An inclusive test is impossible because, as was earlier pointed out, the majority of industrial

corporations do not make public the records of their gross business.

But it has been possible to make a partial test which we feel to be significant. Two hundred and thirty-four industrial concerns which reported their gross business for 1927 were at the end of that year carrying aggregate inventories amounting to 19.16 per cent of their gross business for the year.

This means, *theoretically*, that on the average industry could liquidate its total inventory account in about 11 weeks. As a matter of practical fact, such an accomplishment would be quite impossible. But the figure is at least suggestive.

It is our judgment:

(1) *That outside of a relatively few lines of business, inventories were on a conservative basis at the end of 1927;*

(2) *That they are on a conservative basis at the present moment;*

(3) *That in the majority of lines they will continue to remain on a conservative basis until a broad rise in general prices suggests that the acceptance of greater inventory hazards is worth playing for.*

CHAPTER XII

ACCOUNTS RECEIVABLE

THE size of accounts receivable varies greatly from one line of business to another, and from one individual concern to another in the same line of business.

But in the aggregate the item, as it appears in the balance sheets of leading American industrial concerns, is not relatively a great one, nor one of transcending importance. Except in times of stress, it is not a dangerous item. We find that on the average accounts receivable of 516 leading industrial concerns, for which comparable data were available amounted, at the end of 1927, to:

(1) 22 Per cent of current assets, and to about 18 per cent of total assets.

(2) Around 9 per cent of 1927 gross income. (Estimated on returns from 234 concerns.)

(3) 74 Per cent of cash. (In theory, if the value of receivables should shrink to zero for some reason, there would be more than enough cash, in the aggregate, to cover the loss.)

(4) 101 Per cent of 1927 net profit. (Thus, again in theory, if the value of receivables should shrink to zero, the aggregate loss would amount only to 1 year's

net profit. The absurdity of this assumption, and of the similar one immediately above, is suggested by a statement made to us by the representative of 27 sound finance companies. He declares that repossessions last year amounted to less than 1 per cent of notes outstanding, and that actual financial loss, by reason of repossessions, amounted to less than $1/5$ of 1 per cent.)

Surveying the accounts receivable situation broadly (in so far as it is applicable to the large group of individual concerns here under study), we can only repeat the statement and the terminology of our conclusions relative to the inventory situation in the chapter immediately preceding, viz.:

That the receivables of leading industrial concerns were at the end of 1927, and doubtless are also at the present moment (early 1929), on a thoroughly conservative basis.

Position of the Holder of a Receivable.—The holder of a trade receivable takes his place in the last group of creditors to be satisfied, in the event of the payee's financial embarrassment.

The first claims upon the assets of an embarrassed creditor are usually those of the Federal, state and municipal governments for taxes. Then come mechanics' liens; then the claims of bondholders and others whose claims are specifically secured by certain portions of the physical

assets, and then the general creditors, including banks, sellers who have supplied merchandise, etc.

The position of the sellers of merchandise to a concern that is in difficulties is protected by law up to the limit of the available portion of the assets. The beneficiary of an unpaid trade account may initiate bankruptcy proceedings just as promptly as may the holder of a bond upon which interest has lapsed. *This circumstance provides something of an automatic check upon the size of accounts receivable.*

It provides a more effective check where the seller's customer is a business concern rather than an individual.

With these few generalities noted, attention may now be turned to Table 36, which reports, by lines of business, the percentage of current assets in accounts receivable at the end of 1926 and of 1927.

TABLE 36

**Percentage of Current Assets in Accounts
Receivable**

No. of Cos.	GROUP	1926	1927
7	Agricultural Implements	42.9%	46.4%
7	Office & Business Equip. & Suppl. . .	46.0	39.1
8	Radio and Musical Instruments . . .	34.2	36.0
14	Household Equip. & Supplies	32.9	35.5

CORPORATION PROFITS

TABLE 36 CONCLUDED

No. of Cos.	GROUP	1926	1927
22	Machinery & Machine Equip.	37.4%	35.3%
3	Fertilizers	41.1	35.3
4	Shoes	38.4	34.8
13	Apparel	33.3	34.6
7	Shipping and Shipbuilding	28.1	33.6
3	Meat Packing	39.7	33.0
11	Coal	43.0	32.7
9	Automobile Tires	29.2	31.1
31	Building Equip. & Supplies	30.5	29.1
33	Miscellaneous Manufacturing	26.9	27.2
3	Leather	24.7	27.0
6	Cotton Goods	28.9	26.6
13	Sugar	30.1	26.1
4	Silk Goods	25.7	25.6
9	Drugs, Meds., Cosmetics, etc.	21.9	24.1
13	Railroad Equipment	30.0	24.0
2	Woolen Goods	26.9	21.9
47	Oil	21.4	20.7
6	Electrical Equipment	25.4	20.3
7	Paper	21.6	19.6
14	Chemicals (Industrial)	19.9	18.8
13	Theaters, Mov. Pict's, & Amuse. ...	20.7	18.7
22	Automobile Parts & Accessories....	16.6	18.5
21	Steel	18.9	18.2
50	Retail Trade	18.9	17.9
36	Food Products	19.6	17.5
14	Miscell. Mining & Smelting	15.8	14.3
23	Automobiles	17.3	13.7
17	Copper	13.9	13.0
16	Tobacco Products	14.5	12.6
7	Lead and Zinc	9.7	10.1
Averages, 516 companies.....		23.8%	22.0%

The Chief Variables in Accounts Receivable

(1) The size of the receivables carried by a given concern or by a given line of business tends to vary with the volume of business that is being transacted.

This is such an elemental proposition that it calls for no discussion. If A is accustomed to carry receivables for around 10 per cent of his gross business, he will assuredly be carrying a greater load of receivables—actually if not relatively—in a year when he sells a million units of goods than in a year when he sells only half a million.

(2) The size of corporate receivables tends to vary with the condition of bank credit.

Every seller, if he has his choice, takes cash in advance for the goods that are sold. He often will make a price concession for cash—*i.e.*, allow the so-called “cash discount.” His profits average out the larger on that basis, all other things being equal. His working capital can run lower, and his risks are smaller. Practical business enterprise revolves about all kinds and degrees of compromise with the cash-in-advance policy.

There come times when the buyer can no longer finance himself in the usual channels. He is carrying his customary amount of credit with the seller, and has borrowed at the bank as

heavily as is feasible. The seller is then obliged to make a decision as to whether his own interests will be best served by declining to sell more goods, or by extending more than the customary amount of credit to the customer. Long-term experience appears to have definitely established that the volume of receivables carried by sellers tends to enlarge when bank credit is strained.

(3) From one line of business to another, the size of receivables tends to vary according to long-established practices in each given trade.

The chain stores, for example, usually achieve the ideal of cash in advance. Department stores usually allow their credit risks a month to pay. In other lines, and especially in those lines which deal with other than ultimate consumers, it is customary to carry receivables up to 6 months, and in a few cases for an even longer period. Custom (the so-called "trade practice") is always a vital element in the problem.

(4) Receivables vary with the character and condition of the customer.

A prosperous customer, if he wished it, could always have more credit than an impecunious customer. But ordinarily the prosperous customer does not avail himself of all of the credit that *he could* obtain. So in actual practice it often turns out that it is the impecunious cus-

tomer who utilizes the lion's share of credit. Farmers, as a class, are habitually impecunious. Hence, both the AGRICULTURAL IMPLEMENT and FERTILIZER industries stand in the top half of Table 36. RADIO dealers, APPAREL dealers, COAL dealers, and COTTON GOODS and SILK GOODS dealers were suffering varying degrees of business depression in 1927; the suppliers of these commodities were all carrying, according to Table 36, more than the average volume of receivables in 1927.

Conversely, it will be observed that the majority of the lines which appear in the bottom half of the table have been selling to customers who have been enjoying prosperity.

The *time* when the customer has his funds available is also important in some cases. To cite only one example: farmers must buy their implements and fertilizers in the spring, but do not receive the income from their season's campaign until the fall or winter. It would be out of the question to expect them to pay outright for such expensive articles as implements and fertilizer on the date that these goods are purchased.

(5) **Receivables vary with the character of the product.**

(a) *Durability.* Goods which are not used quickly, or which do not wear out quickly, pro-

vide a certain measure of security for the credit that is granted. Examples: products of AGRICULTURAL IMPLEMENT, OFFICE & BUSINESS EQUIPMENT, MACHINERY, and BUILDING EQUIPMENT trades.

(b) *Costliness*. The buyer of a costly commodity has an argument for demanding credit which the buyer of a cheap, or a small article, does not have. The seller of costly articles must often grant credit to enable him to make his sales.

(c) *Essentialness*. A peculiar situation exists in regard to this characteristic. For the most part, the positions of the various lines in Table 36 are determined without reference to the essentialness of the goods that are produced. Lead and zinc are equally as essential as agricultural implements, but the lead and zinc industry stands at the bottom of the list, with relatively the smallest volume of receivables, while the agricultural implement industry stands at the top, with relatively the greatest receivables.

On the other hand, the radio and musical instrument industry, as well as the household equipment industry (vacuum cleaners, washing machines, etc.), are near the top of the list, while the tobacco products industry is near the bottom. The products of all three lines may be

said, speaking in the strictly economic sense, to be nonessential.

The radio and the household labor-saving habits are newer ones than the tobacco habit. To cultivate the former, sellers are willing to make concessions. They have been obliged to extend credit to increase the volumes of their business.

(6) **Receivables vary with the condition, situation, and purposes of the seller.**

Debt is sometimes used as a competitive tool; X may be unwilling to extend Jones further credit, but Z, for his own purposes, may be quite willing to do so. Moreover, Z's financial situation may be such that he can readily afford to extend further credit, whereas X's financial condition may prohibit it.

And further, as was noted above, the offering of the opportunity to get into debt may have been consciously adopted as a definite part of the selling program of a given line of business.

Degree of Influence.—All of these different factors are effective at different times, in different ways, and to different degree. A thumb-nail summary of the foregoing would consist in the statement that the most important single element in determining the size of a concern's receivables is the line of business in which that

concern is operating, and the current trade practices obtaining in that line.

And always it should be borne in mind that the aggregate receivables of industry are RELATIVELY small, and that except in a minor number of individual cases they present a serious problem only in times of widespread economic distress.

No balance sheet analysis is complete, however, unless it takes receivables into account. There is always an appreciable number of radical deviations which must be explained or justified.

Credit Intermediaries

The Finance Company.—In all of the foregoing we have consistently avoided reference to the finance company's place in the current business structure. This has been a conscious omission, predicated upon the assumption that this type of enterprise is of sufficient importance to justify especial consideration.

The term "finance company" is almost as inclusive as the term "industry." There are many different kinds of such concerns, operating in many different fields and in many different ways. To describe them in the broadest possible way would be to state that the finance companies' function is to purchase evidences of indebted-

ness from sellers, and to hold these documents to maturity. And this broad definition is, indeed, quite sufficient for our present purpose, even though it may be lacking both in technical correctness and in comprehensiveness.

In a word, the finance company is an intermediary between the buyer and the seller. Indirectly, it provides the money which the buyer needs to make certain types of purchases, and directly it provides the money with which the seller is reimbursed, promptly, for the goods which he turns over to the buyer. The most rapid development of this business function has been in the last decade, and especially in the last half of the last decade.

Many persons are accustomed to think of the finance company only in connection with consumer credit, and as operative solely in that field which is popularly known as installment selling. This is quite incorrect. While it is true that the bulk of finance company credit is probably extended to ultimate consumers who purchase automobiles, household equipment, musical instruments, jewelry, furs, etc., on the installment plan, it is further true that the same type of enterprise also furnishes a considerable amount of credit to producers.

Estimates of the volume of paper carried by the finance companies are widely divergent. It

is probably fully as illuminating to assert that this volume amounts to *several* billion dollars at the present time, as it would be to cite the various estimates running from 3½ billions upward.

Several important lines of business have been able during recent years to shift all, or a sizable portion of, their customers' receivables upon the finance companies. *Were it not for the activities of this type of enterprise, the automobile producers would today be carrying a heavier load of receivables than producers in any other line of business, and would be obliged to employ a vastly greater amount of capital than they are now employing.* Likewise, the office and business equipment, radio and musical instrument, household equipment, and machinery industries would be carrying much larger receivables, and would be employing much more capital, than they are at the present time.

Acceptances.—Another development tending to reduce the volume of receivables carried by producers and distributors of goods has been in the acceptance market.

Here again a definition of the broadest sort will adequately serve the immediate purpose. An acceptance, in essence, is nothing more than a trade bill bearing a responsible endorsement. Bankers' acceptance, of which there are cur-

rently something over a billion dollars' worth outstanding, bear bankers' endorsements as well as that of the buyer. Trade acceptances bear only the endorsements of business men or business concerns.

In most cases, the security behind an acceptance (other than the endorsements) consists of physical goods in process of manufacture, in warehouses, or in transit. In a typical transaction the seller of the goods draws a draft upon the buyer; the buyer or his bank, or both, acknowledges the validity of the draft by "accepting it," and the resultant document may be sold to someone else (*i.e.*, discounted) by the seller of the goods.

The net result of the development of the finance intermediaries and of a well-organized acceptance market has been to relieve the seller of a very large portion of the accounts receivable burden.

Certainly this is a salutary development from the standpoint of the seller. Doubtless also it is favorable from the standpoint of the buyer and from the standpoint of business in the large. More often than not, a business enterprise organized especially for the purpose of supplying credit can perform this function both more cheaply and more efficiently than can a business

organization to which the supply of credit is an obligatory and usually unwelcome side line.

The system as it now operates will not have its test by fire until this country drifts into its next period of general business depression.

In the meantime, it would seem a safe prediction that the activity of the finance intermediary will continue to accelerate, and that the lines which are still carrying a considerable volume of receivables will with increasing intensity strive to divest themselves of a growing portion of this burden.

TABLE 37

**50 Companies With the Smallest Percentage of
Current Assets in Accounts Receivable**

	1926	1927
Great Western Sugar Co.	0.20%	0.23%
Magma Copper Co.	0.28	0.58
Utah Copper Co.	2.75	0.65
Kress (S. H.) & Co.	2.43	0.66
Teck Hughes Gold Mines, Ltd. ....	....	0.66
Curtis Publishing Co.	1.72	0.81
American Stores Co.	1.06	0.83
Nipissing Mines Co., Ltd.	0.52	0.88
Kresge (S. S.) Co.	1.27	0.89
Grant (W. T.) Co.	0.89	0.91
Park-Utah Consolidated Mines Co.	6.67	1.26
Kinney (G. R.) Co., Inc.	1.32	1.28
Shattuck (F. G.) Co.	4.04	1.51
Thompson (John R.) Co.	1.28	1.64
McCrary Stores Corp.	1.79	1.66
Alliance Realty Co.	2.80	1.79

TABLE 37 CONCLUDED

	1926	1927
Macy (R. H.) & Co., Inc.	1.89%	1.84%
National Bellas Hess Co., Inc.	5.44	1.95
Miami Copper Co.	4.79	1.96
Grand (F. & W.) Stores Co.	2.99	2.00
Fajardo Sugar Co. of Porto Rico.....	25.36	2.34
Great A. & P. Tea Co. of America.....	5.22	2.46
Kroger Grocery & Baking Co.	0.83	2.81
Granby Consol. Min., Smelt. & Pwr. Co.	2.58	2.86
Consolidated Distributors, Inc.	3.70	3.00
Certo Corp.	2.19	3.27
Waldorf System, Inc.	3.68	3.36
Penney (J. C.) Co.	8.23	3.55
Lima Locomotive Works, Inc.	25.96	3.55
Peerless Motor Car Corp.	4.17	3.60
American Ship & Commerce Corp.	0.92	3.63
Peoples Drug Stores, Inc.	3.52	3.85
Hazeltine Corp.	3.57	4.35
Woolworth (F. W.) Co.	2.80	4.40
Melville Shoe Corp.	3.52	4.45
Metro-Goldwyn Pictures Corp.	7.95	4.72
Pender (David) Grocery Co.	7.02	4.74
Amer. La France & Foamite Corp.	43.72	4.76
National Tea Co.	3.55	5.14
Celanese Corp. of America	22.01	5.44
Alpha Portland Cement Co.	5.98	5.45
Fox Film Corp.	5.45	5.90
Franklin (H. H.) Mfg. Co.	5.62	6.05
Metropolitan Chain Stores, Inc.	1.62	6.13
Hollinger Consol. Gold Mines, Ltd.	3.72	6.32
Homestake Mining Co.	7.89	6.40
Studebaker Corp.	12.25	6.43
Childs Co.	6.53	6.55
Gabriel Snubber Mfg. Co.	18.02	6.67
Nash Motors Co.	9.31	7.02

TABLE 38

**50 Companies With the Greatest Percentage of
Current Assets in Accounts Receivable**

	1926	1927
Spear & Co.	82.8%	84.5%
Motion Picture Capital Corp.	89.8	84.2
Eastern Steamship Lines, Inc.	75.0	76.9
White Sewing Machine Corp.	71.1	73.3
Hartman Corp.	74.1	72.7
Nichols & Shepard Co.	74.3	72.3
Liquid Carbonic Corp.	72.3	71.7
Foundation Co.	62.0	70.4
Warren Bros. Co.	64.8	70.2
Hollander (A.) & Son, Inc.	74.3	66.9
Virginia Iron, Coal & Coke Co.	67.8	66.8
Brunswick Term. & Ry. Sec. Co.	50.0	66.7
Kuppenheimer (B.) & Co.	66.5	66.4
Eureka Vacuum Cleaner Co.	63.9	65.7
Atlantic, Gulf & West Indies S. S. Lines.	56.8	65.3
Mergenthaler Linotype Co.	67.4	64.0
U. S. Hoffman Machinery Corp.	67.4	63.8
Advance Rumely Co.	52.8	63.1
Celotex Co.	73.8	63.2
National Cash Register Co.	71.9	62.3
Stanley Co. of America	33.2	61.4
Manati Sugar Co.	72.2	60.6
Gould Coupler Co.	58.2	60.5
Hoe (R.) & Co., Inc.	54.9	59.2
Submarine Boat Corp.	86.8	57.8
American-Hawaiian S. S. Co.	36.4	56.9
Brown Shoe Co., Inc.	54.4	56.6
Pittsburgh Terminal Coal Corp.	67.3	56.6
Intertype Corp.	59.8	55.1
Intern'l Agricultural Corp.	51.8	55.1
Canada Dry Ginger Ale, Inc.	36.9	54.8
Norwalk Tire & Rubber Co.	43.5	54.7

TABLE 38 CONCLUDED

	1926	1927
Gillette Safety Razor Co.	48.8%	54.7%
Telaugraph Corp.	71.4	54.6
Christie, Brown & Co., Ltd.	50.0	53.7
General American Tank Car Corp.	58.9	54.4
Mack Trucks, Inc.	53.0	53.1
Air Reduction Co., Inc.	45.4	51.9
Electric Boat Co.	43.2	51.7
Deere & Co.	43.5	50.7
Penn. Coal & Coke Corp.	60.7	50.6
Bloomington Bros., Inc.	62.5	49.6
Brunswick-Balke-Collender Co.	47.3	49.4
Ahumada Lead Co.	57.0	48.6
Continental Baking Corp.	43.7	47.8
American Type Founders Co.	53.6	47.7
Hart Schaffner & Marx	40.2	47.7
American Wholesale Corp.	49.7	47.6
American Sugar Refining Co.	44.9	47.3
Devoe & Reynolds Co., Inc.	48.8	47.1

CHAPTER XIII

THE CASH ACCOUNT

THERE are few general principles which are applicable to industry's cash account in the aggregate, and even fewer which characterize the policies of one line of business as contrasted with those of another line. Hence this brief chapter will, for the most part, confine itself to only two phases of the cash position: (a) an effort to portray the significance of the size of the cash resources of leading concerns at the present time, and (b) an estimate and appraisal of future probabilities.

It is no more than the formulation of a platitude to observe that the primary objective of every business concern is to acquire cash; that is why it is a business concern. Having obtained cash, the question of what to do with it—what portion to pass along to security owners, what portion to retain temporarily in the hope of later distributing it, what portion to retain as permanent working capital, what portion to reserve against future contingencies of all kinds, what portion to plow back into the business immedi-

ately for renewals and extensions, etc.—becomes almost wholly a matter of specific policy on the part of a given corporation.

General business conditions and prospects are, of course, influential; so also, to some extent, are conditions within a given industry. But it is our judgment that such conditions take a secondary place in the approach to the problem, and that the dominant consideration at all times reflects the policies and plans of the individual concern. That is why, in a discussion of the cash position, generalities fall mainly beside the point.

Size of Current Cash Holdings.—At the close of 1927, cash and equivalent of the 516 leading industrial concerns which it has been found feasible to study closely from this standpoint, amounted to 3,178 million dollars. The net increase during 1927, as compared with the close of 1926, amounted to 283 millions, or 9.8 per cent.

Cash holdings at the close of 1927 were equal to 10.43 per cent of total assets, to approximately 30 per cent of current assets, to 61.2 per cent of inventories, and to 134.5 per cent of accounts receivable.

Of the 516 concerns selected for especial study, 335 made payments to various classes of security holders in 1927. These payments amounted to

1,663 million dollars. Cash holdings of the same 335 companies amounted to 3,049 millions at the end of 1927. They were, therefore, equivalent to 184 per cent of the total 1927 payments to security owners.

To state this fact in another way: without one cent of additional profit, these 335 concerns could continue to make payments to all classes of security holders, at the 1927 rate, for 1 year and 10 months, before aggregate cash would become exhausted.

At the 1927 rate of payment, these 335 companies would require 333 million dollars for service on their *funded debt and preferred stock* for another full year. Subtracting this amount from total cash, the remainder is equal to 204 per cent of 1927 common dividends.

Two hundred and seventy-three companies on the full list were carrying a funded debt, the par value of which at the close of 1927 was 3,820 millions. Cash of these particular companies was 1,611 millions. Hence, cash alone was sufficiently large to have permitted the retirement of some 42 per cent of total funded debt.

Finally, cash of the 516 companies at the end of 1927 was 137 per cent of (or 37 per cent greater than) 1927 net profit.

We believe the aggregate cash position of leading industrial concerns at the close of 1927 to

have been stronger than at any previous time in history. And we believe the cash position to have improved still further during 1928.

TABLE 39

The Cash Position of Leading Lines of Business

No. of Cos.		% of Current Assets in Cash	
		1926	1927
7	Lead and Zinc	64.10%	63.45%
7	Shipping and Shipbuilding	62.71	58.70
13	Railroad Equipment	48.05	55.08
14	Chemicals (Industrial)	45.87	49.14
6	Electrical Equipment	39.77	46.28
36	Food Products	45.03	45.52
23	Automobiles	37.57	45.13
9	Drugs, Medicines, Cosmetics, etc..	46.21	43.99
22	Automobile Parts and Accessories.	42.57	41.98
14	Miscellaneous Mining and Smelting	38.41	41.12
8	Radio and Musical Instruments...	23.71	33.46
7	Office and Business Equipment & Supplies	21.47	32.17
33	Miscellaneous Manufacturing	32.27	31.71
21	Steel	32.52	31.00
17	Copper	30.85	29.60
50	Retail Trade	28.71	29.43
31	Building Equipment and Supplies.	27.67	28.87
11	Coal	28.05	24.50
47	Oil	19.08	23.02
14	Household Equipment and Sup. ..	16.99	21.80
3	Fertilizers	22.52	21.77
7	Paper	22.55	20.94
22	Machinery and Machine Equip....	17.17	19.93
13	Theaters, Moving Pictures, and Amusements	19.09	18.36
13	Sugar	18.48	18.29

CORPORATION PROFITS

TABLE 39 CONCLUDED

Cos.		% of Current Assets in Cash	
		1926	1927
4	Shoes	14.53%	17.67%
7	Agricultural Implements	13.73	17.15
16	Tobacco Products	14.70	14.83
6	Cotton Goods	17.82	14.36
9	Automobile Tires	12.39	13.89
13	Apparel	15.69	13.05
2	Woolen Goods	10.19	11.39
3	Meat Packing	7.42	11.30
4	Silk Goods	12.41	10.58
3	Leather	5.14	5.61
Average 516 Companies.....		27.39%	29.63%

Outlook.—The reasons for believing that cash holdings have further increased during 1928 are (a) because general prosperity has prevailed, and industrial earnings have been running at a rate even higher than that of 1927, and (b) because the level of interest rates in the time money market and more especially in the call money market has made cash a real earnings asset.

Call rates averaged 7.08 per cent during the third quarter of 1928. This is a higher rate than many well-organized concerns are ordinarily able to earn on their entire invested capital, even in years of widespread prosperity. This is why there was such a large volume of corporate funds available to the stock market during the last half of 1928; it explains why corporations recently

have been so eager to conserve, and to augment, their cash reserves. A costly luxury in times of low money rates, corporate cash during the last half of 1928 became an extremely important source of earning power.

Wall Street estimates that 5 per cent call money marks the minimum level at which the call market will attract large volumes of corporate funds—that a decline in the rate to below 5 per cent would be concurrent with heavy withdrawals of the cash reserves from the market.

This figure is only approximate, and represents not much more than a mere guess. But the fact that guesses in this respect are being currently made signifies that the present situation is temporary. It emphasizes the principle that the size of corporate cash reserves is in some respects related to the going rate for money, and that there is somewhere a point in the interest rate at which new problems relative to the cash reserve present themselves for solution.

Long Term Trend Is Upward.—The long term trend of American industry's cash reserve we believe to be upward. That is, over a period of years, we believe that leading corporations will find it to their purpose further to increase their aggregate holdings of ready money.

But this trend will not be a steady one, and least of all do we expect the annual rate of in-

crease to run regularly at the 1927 rate (say 9 per cent). We have already seen that the going rate for money constitutes an important influence at all times. Other essential modifying factors will be:

(1) *The shifting volumes of inventories and accounts receivable.*

The three leading items in the current assets account (cash, inventories, and accounts receivable) are shuffled back and forth as readily as the individual pieces in a pack of playing cards. Cash tends to decrease, not only relatively but actually, in periods when inventories are rapidly expanding. (There is nothing with which to pay for inventories except cash or credit, and up to a certain point the stronger corporations normally choose the former.)

When inventories are expanding rapidly, business as a whole is usually booming. Accounts receivable are, therefore, likewise expanding. This means merely that sellers are lending buyers an increasing amount of their own cash. Broadly speaking, the early stages of a real business boom ordinarily bring a contraction, rather than an expansion, in the cash accounts of leading corporations.

(2) *The size of the cash account tends to vary with the rate of profits*—a conclusion so obvious that it needs no argument.

(3) *The cash account will temporarily decline in periods of depression.*

This is true not only because declining profits check the rate of accretions, and because losses on inventories and operations eat into the cash reserve, but also because industry generally dislikes, above all else, to reduce the size of its payments to security holders. For a time at least, even when earnings are low or nil, interest and current dividend obligations will be met out of cash surplus.

This program has its obvious limits. But there is ample basis for the belief that, in the past, the total payment made annually to security owners has been one of the most stable elements in our economic structure.

The influences of all of the factors cited above are, it will be noted, temporary in nature. Except in periods of grave and widespread economic depression, they tend more to *check the rate of growth* in the corporate cash account, rather than seriously to *deplete* that account. It still remains true that the long term trend of the cash account should, and probably will, continue upward.

And this circumstance constitutes one of the most important safeguards of the holders of the securities of strong industrial concerns.

TABLE 40

**50 Concerns Selected from Full List, with Greatest
Percentage of Current Assets in Cash**

	% of Current Assets in Cash	
	1926	1927
American Ship and Commerce Corp. . . .	99.1%	96.4%
Hazeltine Corp.	96.4	95.7
Park-Utah Consol. Mines Co.	83.2	91.8
Hollinger Consol. Gold Mines Ltd. . . .	89.2	89.1
Fox Theatres Corp.	99.3	88.3
Shattuck (F. G.) Co.	48.5	88.2
Butte and Superior Mining Co.	85.6	86.6
Thompson (John R.) Co.	82.7	86.3
American Arch Co.	77.6	84.8
Nash Motors Co.	76.3	84.8
Shubert Theatre Corp.	66.8	84.7
Madison Square Garden Corp.	46.7	83.5
American Ship Building Co.	79.1	83.3
Teck Hughes Gold Mines Ltd.	89.0	82.9
Lima Locomotive Works, Inc.	60.3	82.0
Gabriel Snubber Mfg. Co.	61.6	81.5
Dome Mines, Ltd.	76.7	81.1
Life Savers, Inc.	61.4	80.6
Homestake Mining Co.	74.9	80.1
Howe Sound Co.	74.0	78.3
Island Creek Coal Co.	71.1	76.1
Union Tank Car Co.	75.4	75.9
Ford Motor Co. of Canada, Ltd.	45.7	74.9
Nipissing Mines Co., Ltd.	75.5	73.7
American Locomotive Co.	59.6	73.5
Intercontinental Rubber Co.	78.3	72.2
New York Air Brake Co.	64.8	72.2
St. Joseph Lead Co.	73.3	72.1
Timken Roller Bearing Co.	70.5	71.8
Corn Products Refining Co.	68.2	71.4
Fleischmann Co.	66.3	71.3

TABLE 40 CONCLUDED

	% of Current Assets in Cash	
	1926	1927
Fanny Farmer Candy Shops, Inc.	67.2%	70.9%
Celanese Corp. of America	41.1	70.9
Great Lakes Dredge and Dock Co.	68.4	70.4
Allied Chemical & Dye Corp.	65.6	70.1
Mexican Seaboard Oil Co.	50.7	70.0
Childs Co.	70.4	69.6
Hecla Mining Co.	58.6	69.0
Transue & Williams Steel Forging Corp.	67.5	68.6
Libbey-Owens Sheet Glass Co.	70.1	67.2
U. S. Cast Iron Pipe & Fdy. Co.	56.1	67.1
Midland Steel Products	72.3	67.1
Miami Copper Co.	62.2	66.7
Forhan Co.	61.3	66.7
General Baking Corp.	58.0	66.4
National Biscuit Co.	64.9	66.1
American Steel Foundries	57.3	65.9
White Rock Mineral Springs Co.	59.5	65.5
United Fruit Co.	67.1	65.2
Purity Bakeries Corp.	61.2	64.0

TABLE 41

**51 Concerns, Selected from Full List, Which Had
Largest Actual Cash Reserves at End of 1927**

(Burroughs Adding Machine and Reynolds Tobacco had virtually identical cash holdings, and both ranked fiftieth on our list. Therefore both were included, bringing the list up to 51, rather than to the usual 50.)

	Cash, 1927 (Million \$)
General Motors Corp.	\$208.18
United States Steel Corp.	180.93
Standard Oil Co. of New Jersey	169.76
General Electric Co.	153.76

TABLE 41 CONTINUED

	Cash, 1927 (Million \$)
Allied Chemical & Dye Corp.	102.07
Standard Oil Co. (Indiana)	86.87
Bethlehem Steel Corp.	47.80
Nash Motors Co.	42.27
International Harvester Co.	42.15
Corn Products Refining Co.	40.84
Sears, Roebuck & Co.	40.20
American Locomotive Co.	37.10
Amer. Smelting & Refining Co.	35.38
Jones & Laughlin Steel Corp.	33.58
Westinghouse Electric & Mfg. Co.	32.97
Chrysler Corp.	32.64
E. I. duPont deNemours & Co., Inc.	32.60
Eastman Kodak Co.	32.41
Vacuum Oil Co.	32.10
Great A. & P. Tea Co. of America	31.12
United Fruit Co.	31.07
American Railway Express Co.	28.83
Standard Oil Co. of California	26.59
Fleischmann Co.	25.23
Goodyear Tire & Rubber Co.	24.01
National Biscuit Co.	20.59
Borden Co.	20.90
American Sugar Refining Co.	20.57
Woolworth (F. W.) Co.	20.42
United Cigar Stores Co. of America.....	19.95
Armour & Co. (Ill.)	19.93
Liggett & Myers Tobacco Co.	19.87
Westinghouse Air Brake Co.	19.68
Swift & Co.	19.42
Dodge Bros., Inc.	19.25
Marland Oil Co.	18.36
Kennecott Copper Corp.	18.29
Radio Corp. of America	18.28

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TABLE 41 CONCLUDED

	Cash, 1927 (Million \$)
Union Oil Co. of California	18.21
Texas Corp.	18.11
Anaconda Copper Mining Co.	18.06
Studebaker Corp.	17.49
Timken Roller Bearing Co.	17.40
Packard Motor Car Co.	17.29
Standard Oil Co. of New York	17.04
Gulf Oil Corp. of Pa.	16.88
Union Carbide & Carbon Corp.	16.27
Phillips Petroleum Co.	16.26
International Shoe Co.	16.13
Burroughs Adding Machine Co.	15.80
Reynolds (R. J.) Tobacco Co.	15.80

CHAPTER XIV

CURRENT LIABILITIES

STUDY of the current liabilities of leading industrial corporations serves further to emphasize the opinion that concerns of this character are, on the average, in an extraordinarily comfortable financial position at the present time.

Indeed, current liabilities constitute one of the least important items on industry's composite balance sheet. At the close of 1927 this item was equivalent, on the average and for the full list of corporations here under study, to approximately:

- 22 Per cent of current assets;
- 7 Per cent of total assets;
- 71 Per cent of cash (*i.e.*, cash was 41 per cent greater than current liabilities, and cash, it will be recalled, is only one of three important items in the current assets account);
- 100 Per cent of accounts receivable (which means that the sum owed to leading concerns, virtually all of which is readily

collectible, is alone sufficient to cancel current liabilities).

Distribution of Liabilities.—The separate sub-items in the current liabilities account assume even less importance than the account as a whole. For this particular phase of the analysis, it was found possible to utilize data for only 514 corporations from our full list of 545, due to the fact that the remaining 31 rendered their balance sheets in such a form that differentiation of the various sub-items could not be made.

At the ends of 1926 and 1927, respectively, the aggregate current liabilities of these 514 corporations were distributed as follows:

TABLE 42
514 Corporations

	Portion of Current liabilities in		
	Bank Loans	Accounts Payable	All Other
1926	16.5%	49.0%	34.5%
1927	18.6	47.7	33.7

The distribution of current liabilities by industries is reported in Table 43. In several groups the number of individual concerns included is so small that the results are not representative. They have been included in the tabulation only with the idea of presenting the full line of data upon the basis of which aggregate results were determined.

TABLE 43

Distribution of Current Liabilities by Industrial Lines

(Arranged on the basis of percentage of current liabilities
in bank loans at the end of 1927.)

No. of Cos.	GROUP	% Of Current Liabilities in					
		Bank Loans	Accts. Pay.	Misc. Liab.	Bank Loans	Accts. Pay.	Misc. Liab.
		1926			1927		
13	Sugar	58.9%	26.3%	14.8%	65.0%	23.8%	11.2%
3	Silk Goods	70.4	19.3	10.3	64.9	25.0	10.1
4	Woolen Goods	57.9	22.1	20.0	59.5	12.5	28.0
7	Shipping and Shipbuilding....	43.7	27.5	28.8	54.1	19.1	26.8
3	Leather	84.0	11.6	4.4	49.0	23.1	27.9
3	Fertilizers	46.0	36.9	17.1	47.6	45.8	6.6
17	Tobacco Products	37.6	28.8	33.6	47.4	20.9	31.7
3	Meat Packing	38.5	59.5	2.0	44.5	54.1	1.4
6	Cotton Goods	45.5	33.1	21.4	41.6	30.5	27.9
13	Apparel	42.0	34.2	23.8	41.5	29.2	29.3
4	Shoes	35.6	34.5	29.9	39.2	29.8	31.0
13	Theaters, Moving Pictures, & Amusements	48.8	24.4	26.7	38.1	31.9	30.0
10	Coal	20.7	42.8	36.5	36.6	32.2	31.2
9	Automobile Tires	30.5	61.2	8.3	29.3	58.6	12.1
6	Radio & Musical Instruments...	29.2	58.6	12.2	28.6	59.0	12.4
17	Copper	1.7	54.3	44.0	27.1	42.4	30.5
7	Paper	...	66.4	33.6	22.0	48.7	29.3
40	Oil	18.1	58.9	23.0	19.1	59.2	21.7
36	Food Products	19.7	43.6	36.7	15.8	45.5	38.6
24	Machinery & Machine Equip't	18.7	43.2	38.1	15.4	46.6	38.0
14	Household Equipm't & Supplies	8.0	62.1	29.9	14.6	61.5	23.9
22	Automobile Parts & Accessories	14.7	46.9	38.4	12.9	54.0	33.1
49	Retail Trade	15.5	59.9	24.6	12.2	61.4	26.4
29	Building Equipm't & Supplies.	7.8	50.1	42.1	11.1	49.4	39.5
9	Drugs, Medicines, Cosmet's, etc.	...	26.5	73.5	9.2	22.4	68.4
14	Misc. Mining & Smelting	6.7	62.7	30.6	8.5	62.6	28.9
33	Miscellaneous Manufacturing ..	6.0	54.8	39.2	7.3	58.1	34.6
7	Agricultural Implements	13.1	67.9	19.0	7.1	69.2	23.7
6	Electrical Equipment	0.3	45.7	56.0	5.6	42.2	52.2
7	Lead and Zinc	4.0	24.2	71.8	4.7	21.8	73.5
13	Railroad Equipment	1.5	53.2	45.3	4.3	46.5	42.2
24	Automobiles	2.4	41.1	56.5	3.2	41.7	55.1
14	Chemicals (Industrial)	2.3	42.7	55.0	2.0	42.7	55.3
20	Steel	1.4	54.1	44.5	2.0	53.1	44.9
6	Office & Bus. Equip. & Supplies	7.9	35.9	56.2	1.8	36.3	61.9
33	Miscellaneous Services	1.4	29.0	69.6	1.4	27.1	71.5
1	Rayon (Celanese Corp.)	...	56.8	43.2	...	45.2	54.8
	Averages: 514 Companies	16.5	49.0	34.5	18.6	47.7	33.7

The bank loan and accounts receivable items will be accorded brief individual discussion. No purpose would be served by an attempt to analyze the "all other" item. This is composed of a miscellaneous assortment of small and unimportant items, such as accrued interest, taxes, insurance, dividends, etc., all of which bulk relatively large when thrown together, but none of which, individually, is of significance.

Bank Loans

Analysis of the bank loan situation is somewhat complicated at the outset by the fact that of the 514 comparable companies, only 190, or roughly 2 out of every 5, had any bank loans whatsoever at the end of 1927. In studying the aggregate distribution of current liabilities, it was deemed proper to report results (see Table 42 preceding) on the basis of the entire list of 514 companies. But in the specific analysis of bank loans, attention will be given mainly to those 190 concerns which actually had such indebtedness. The distribution of the current liabilities of this smaller list changes materially from that of the larger one. Table 44 below reports the distribution for the smaller list:

Whereas the bank loans of all leading industrial corporations (assuming the full list of 514

TABLE 44

190 Corporations Which Had Bank Loans

	Bank Loans	Portion of Current Liabilities in Accounts Payable	All Other
1926	38.3%	41.7%	20.0%
1927	44.7	37.3	18.0

to be representative of "all leading corporations") amounted to but 18.6 per cent of current liabilities, the same class of indebtedness of the 190 concerns which actually had bank loans amounted to nearly 45 per cent of current liabilities.

And, moreover, bank loans of these 190 companies were equivalent to about 13 per cent of current assets at the end of 1927, whereas the aggregate bank indebtedness of 514 concerns was equivalent to only 4 per cent of current assets.

But even so, cash of the 190 companies which had bank loans at the end of 1927 aggregated more than enough to have canceled these loans entirely; accounts receivable were approximately twice as great as bank loans; inventories were approximately four times as great.

Thus narrowing the study down to its smallest possible perspective, it is still difficult to become excited or alarmed about the bank loan situation, in so far as it applies to those leading industrial concerns that are here under study.

Indebtedness Not Disgraceful.—Since the days of the debtors' prisons, there has been a tendency on the part of many observers of the economic panorama to regard indebtedness as somewhat of a disgraceful condition. No opinion could be less sound. No economic society could have reached the high stage of development that has been achieved in this country had not its business organization had at its command at all times a banking organization which could supply the additional capital that has been continuously needed.

It is not indebtedness *per se* that is disgraceful or dangerous, but rather the overextension of indebtedness or continuance in debt. The ability temporarily to get into debt often offers either the opportunity to escape from transient business difficulties or substantially to increase profits (currently or prospectively) by utilizing more capital than a given business concern itself can conveniently supply.

For that reason, we wish particularly to emphasize that no stigma whatsoever is attached to Table 45, which lists the 50 concerns which had the largest percentage of current liabilities in bank loans at the end of 1927. As in preceding lists in the earlier chapters, the purpose in presenting this list is to supply examples and to

report radical deviations from the average situations.

TABLE 45

**50 Corporations, Selected from List of 514, Which
Had Greatest Percentage of Current Liabilities
in Bank Loans**

	% of Cur. Liab. in Bank Loans		% Earn. on Invest. Cap.
	1926	1927	
Standard Commercial Tobacco	88.7%	97.8%	7.41%
Arlington Mills	96.0	95.7	1.04
Nashawena Mills	93.9	95.2	4.76
Motion Pic. Capital Corp....	93.3	91.2	10.40
American Ship & Com. Corp...	90.5	90.5	7.14
Great Western Sugar Co.	86.7	93.1	6.04
Ipswich Mills	80.7	88.4	d9.92
Century Ribbon Mills, Inc. ..	83.4	87.8	1.41
American Hide & Leather Co.	88.0	87.4	0.49
Mexican Seaboard Oil Co.	0.6	85.4	d22.75
Guantanamo Sugar Co.	86.2	84.3	7.24
Electric Boat Co.	53.4	83.5	0.27
Crex Carpet Co. ....	....	83.3	d4.84
Symington Co.	27.0	81.0	4.82
Cudahy Packing Co.	75.4	79.8	6.85
American Beet Sugar Co.	92.2	79.2	4.97
Kelly-Springfield Tire Co. ...	84.2	78.5	4.32
Pierce, Butler & Pierce Mfg..	64.8	77.6	2.50
Durham Hosiery Mills	78.6	77.6	2.90
Wesson Oil & Snowdrift Co. ..	....	76.8	9.65
Martin-Parry Corp.	54.8	75.6	3.50
Lehn & Fink Products Co. ...	....	74.6	13.80
Bayuk Cigars, Inc.	78.8	74.4	13.72
Manati Sugar Co.	69.1	73.2	6.78
Cuban Dominican Sugar Corp..	66.9	73.0	3.37
Seagrave Corp.	63.3	72.6	11.11
Botany Consol. Mills, Inc. ...	78.1	72.2	.066

TABLE 45 CONCLUDED

	% of Cur. Liab. in Bank Loans		% Earn. on Invest. Cap.
	1926	1927	1927
Manhattan Shirt Co.	69.0%	71.9%	11.30%
Remington Arms Co., Inc. ...		70.8	5.47
American Republics Corp. ...	69.3	70.8	1.24
Manhattan Elec. Sup. Co., Inc. ...		70.7	7.27
Amer. Zinc, Lead & Smelt. Co.	65.0	70.2	d2.19
Cuba Cane Sugar Corp.	70.1	69.6	3.39
Central Aguirre Sugar Co. ..	75.1	69.2	20.12
Hoe (R.) & Co., Inc.	66.9	69.2	2.69
Houston Oil Co. of Texas	36.0	68.6	7.66
Endicott-Johnson Corp.	63.1	68.4	10.13
Spear & Co.	65.5	68.0	11.16
Congress Cigar Co., Inc.	80.0	67.4	40.64
Panhandle Prod. & Ref. Co. ..	60.8	67.1	0.92
Mack Trucks, Inc.	28.0	65.5	10.50
Punta Alegre Sugar Co.	75.0	65.4	6.34
Aeolian-Weber Piano & Pianola Co.		65.2	4.43
Producers & Refiners Corp. ...	68.7	64.4	d0.64
Mengel Co.	66.5	63.1	5.68
Butler Bros.	59.6	63.0	8.81
Advance Rumley Co.	75.8	62.9	0.44
Pathé Exchange, Inc.		62.7	d15.34
Kelsey-Hayes Wheel Corp. ..		61.6	3.07
Superior Oil Corp.	63.2	61.5	d10.43

Averages:

50 Concerns on this list... ..	77.0%	4.97%
514 Concerns	18.6%	9.24%

d = deficit

Bank Loans and Earnings.—It will be noted that in Table 45 there has been supplied an additional column of figures, showing the percentage

earned on invested capital by each of these 50 concerns in 1927.

These additional figures forcefully illustrate that in the cases of some specific concerns a relatively large volume of bank loans constitutes in reality the earmark of a strong situation—such concerns are able to employ their borrowed funds with considerable success, and to use them not as a means of emerging from difficulties (which do not exist) but instead as a means for increasing profits.

However, the table supplies the basis for an interesting commentary. It will be observed that taken together, the 50 corporations listed therein earned some 5 per cent on their invested capital in 1927, while in that same year the 514 on the complete list here under study earned $9\frac{1}{4}$ per cent.

It must be true, then, that on the average and in times of normal prosperity, business finds it more profitable to supply its own working capital than to borrow it from the banks. As has already been pointed out, there are, of course, numerous exceptions. But the figures applicable to the broader situation can scarcely be disputed.

It is in times of business boom (when commodity prices are rising, when inventories are increasing, and when the total volume of opera-

tions is expanding) or in times of real distress (when operating losses are eating into working capital and when income is declining) that business must resort to the banks more extensively, regardless of its wishes in the matter.

An Anomaly.—The figures that have been previously presented are anomalous in at least one respect.

Those loans which the banks report as “all other loans and discounts” are mainly commercial loans—to business concerns of all kinds and degrees. The total outstanding volume of such loans, at the end of 1927, was greater than at any year-end since 1920. The figure has mounted steadily since 1922, the termination of each successive calendar year showing an increase as compared with the preceding year.

How can this fact be reconciled with our optimistic statements concerning the general financial condition, and the relative unimportance, of the group of industrial concerns here under study?

The answer is that our data in this respect are in all probability not typical for business as a whole. Almost to the point of ennui we have tried to use the adjective “leading” in our numerous references to the group selected for study. The names on our full list are those of the largest industrial organizations in the coun-

try, and probably the most successful. Many of them are very old concerns. Over a period of time they have been able to store up, from earnings, working capital sufficient (sometimes redundant) for their normal needs.

They have thus freed themselves from the banks to a greater extent than has the average business concern throughout the country as a whole. We take this as merely another evidence of the fact that, by and large and over a period of time, business finds it more profitable to furnish its own working capital—in so far as it is possible to do so—than to borrow it from others.

Accounts Payable

In actual volume, accounts payable of the 514 leading industrial concerns for which comparable data are available, bulk about $2\frac{1}{2}$ times as great as aggregate bank loans, but we should judge their significance to be considerably less.

The preponderant percentage of items currently payable is in ordinary trade bills, which will be automatically canceled as they fall due. We have compiled the usual list of the 50 concerns on our complete list which have the largest percentage of their current liabilities in accounts payable, but we believe that its publication

would hardly justify the space required. It contains such names as these:

Curtis Publishing Co.	Intern'l Harvester Co.
Gillette Safety Razor Co.	Great A. & P. Tea Co.
Procter & Gamble Co.	Ford Motor Co. of Canada
Victor Talking Mach. Co.	Standard Oil Co. of N. Y.
Coca-Cola Co.	Radio Corp. of Am.
Arnold Constable Corp.	Kroger Grocery & Bkg. Co.

Measured by any sensible standards, the financial positions of such concerns as these must be judged to be abnormally strong. Indeed, a number of them only worm their way into our list of 50 by reason of the fact that accounts payable were 100 per cent of current liabilities; there were no bank loans, and no other current liabilities.

It is only in times of stress—stress for business as a whole or for a particular corporation—that accounts payable become a serious problem. Then they become not merely serious, but of transcending importance. Either they must be paid, somehow, or the debtor concern must face the bankruptcy courts. In times of normal prosperity (such as 1926-1927) accounts payable, so far as leading corporations as a group are concerned, are not of much greater economic importance than is the individual consumer's running account at his grocery store.

In the study of corporation statements the analyst is, of course, always on the alert for individual exceptions to this generality. The most common symptoms of distress, from this standpoint, are either (a) a sudden and sizable increase in the accounts payable item, or (b) continuance of accounts payable at a relatively high level over a period of time.

CHAPTER XV

"THE FIFTY CLUB"

IN THE preceding chapters, there have appeared numerous lists of individual corporations, for the most part illustrating radical deviations from various average situations. Except in the long table reporting the percentage of gross saved for net, the entries on all these lists have numbered 50. The figure itself was chosen because of the assumption that a list of that length would be long enough to be representative, and at the same time not too long to defeat its own purpose.

But the consistency with which the figure has been adhered to has led one gentleman who has examined the data to inquire whether the ultimate purpose has been that of making nominations for some sort of corporation "Fifty Club." And the fact of the case is that this query is not far beside the point, although the factitiously named Fifty Club, as developed by the tabular matter on the following pages, will be found to contain not quite half that number of names.

The accompanying tables will either prove to

be self-explanatory or will be properly explained as they are introduced.

All data are for the year 1927—balance sheet data reporting results as of the end of that year, and income account data reporting the results of that year's operations.

And since comparison from one year to another was not necessary for this particular phase of the study, it was possible to utilize data for 551 leading corporations—6 more than it was feasible to use in the preceding 1926-1927 income account studies, and 7 more than it was possible to use in the 1926-1927 balance sheet studies. In every list that follows, therefore, selection of the specific names which appear upon that list has been made from the full list of 551, unless otherwise stated.

Further, it may be helpful if attention is again called to the fact that only *industrial* corporations are being considered in this series of studies. Both railroads and utilities have, consistently, been omitted.

I—AMERICA'S LARGEST INDUSTRIAL CORPORATIONS

List A—50 Corporations with Largest Total Assets

	Rank	Total Assets 1927 (Million \$)
Allied Chemical & Dye Corp.	15	349.55
American Can Co.	37	167.98
Amer. Smelting & Refining Co.	27	227.74
American Sugar Refining Co.	40	158.10
American Tobacco Co.	30	210.51
Anaconda Copper Mining Co.	9	528.13
Armour & Co. (Ill.)	10	471.24
Atlantic Refining Co.	45	138.89
Bethlehem Steel Corp.	6	651.70
Chile Copper Co.	38	163.63
Cuba Cane Sugar Corp.	50	129.00
Dodge Bros., Inc.	49	131.57
E. I. duPont deNemours & Co., Inc. ...	14	351.44
Ford Motor Co.	4	742.06
General Electric Co.	12	428.15
General Motors Corp.	3	1,098.48
Goodyear Tire & Rubber Co.	29	213.31
Gulf Oil Corp. of Pa.	8	552.83
Humble Oil & Refining Co.	33	189.85
International Harvester Co.	19	325.58
International Paper Co.	22	290.53
Jones & Laughlin Steel Corp.	32	201.05
Kennecott Copper Corp.	23	278.34
Liggett & Myers Tobacco Co.	34	189.40
Pan-Amer. Petrol. & Trans. Co.	24	251.16
Paramount-Famous-Lasky Corp.	42	156.93
Phillips Petroleum Co.	44	143.49
Pittsburgh Coal Co.	41	157.95
Prairie Oil & Gas Co.	35	186.32

CORPORATION PROFITS

LIST A CONCLUDED

	Rank	Total Assets 1927 (Million \$)
Pure Oil Co.	26	237.25
Republic Iron & Steel Co.	46	137.79
Reynolds (R. J.) Tobacco Co.	43	154.44
Sears, Roebuck & Co.	36	184.74
Sinclair Consol. Oil Corp.	13	367.89
Standard Oil Co. of California.....	7	579.31
Standard Oil Co. (Indiana)	11	462.61
Standard Oil Co. of New Jersey.....	2	1,426.60
Standard Oil Co. of New York.....	5	678.09
Studebaker Corp.	48	135.88
Swift & Co.	17	337.21
Texas Corp.	20	324.81
Union Carbide & Carbon Corp.	25	249.56
Union Oil Co. of California.....	18	333.77
United Fruit Co.	31	208.28
U. S. Rubber Co.	16	340.00
United States Steel Corp.	1	2,433.58
Vacuum Oil Co.	39	158.80
Westinghouse Electric & Mfg. Co.	28	222.63
Woolworth (F. W.) Co.	47	137.75
Youngstown Sheet & Tube Co.	21	300.01
Totals: 50 Companies (this list).....		18,495.91
551 Companies (total list).....		33,718.41

List B—50 Corporations with Largest
Current Assets

	Rank	Current Assets 1927 (Million \$)
Allied Chemical & Dye Corp.	12	145.72
Amer. Smelting & Refining Co.	27	89.93
American Sugar Refining Co.	36	64.40
American Tobacco Co.	19	111.45
American Woolen Co.	34	67.95

LIST B CONTINUED

	Rank	Current Assets 1927 (Million \$)
Anaconda Copper Mining Co.	22	107.19
Armour & Co. (Ill.)	8	203.20
Atlantic Refining Co.	45	53.27
Bethlehem Steel Corp.	11	148.87
Chrysler Corp.	42	55.66
Corn Products Refining Co.	41	57.21
E. I. duPont de Nemours & Co., Inc. ...	32	70.53
Eastman Kodak Co.	29	71.67
Firestone Tire & Rubber Co.	43	54.30
Ford Motor Co.	3	439.79
General Electric Co.	5	271.73
General Motors Corp.	4	428.69
Goodrich (B. F.) & Co.	30	71.04
Goodyear Tire & Rubber Co.	21	110.65
Great A. & P. Tea Co. of America.....	25	95.65
Great Western Sugar Co.	48	51.59
Gulf Oil Corp. of Pa.	23	101.58
Humble Oil & Refining Co.	39	58.89
International Harvester Co.	7	215.19
International Shoe Co.	33	68.12
Jones & Laughlin Steel Corp.	31	70.73
Liggett & Myers Tobacco Co.	17	126.76
Lorillard (P.) & Co.	35	65.84
Montgomery Ward & Co.	44	53.93
National Lead Co.	49	51.25
Prairie Oil & Gas Co.	18	115.09
Procter & Gamble Co.	38	61.16
Reynolds (R. J.) Tobacco Co.	13	136.30
Sears, Roebuck & Co.	24	101.58
Sinclair Consolidated Oil Corp.	47	52.59
Standard Oil Co. of California.....	20	111.15
Standard Oil Co. (Indiana)	10	157.55
Standard Oil Co. of New Jersey	1	615.09
Standard Oil Co. of New York	6	218.73

CORPORATION PROFITS

LIST B CONCLUDED

	Rank	Current Assets 1927 (Millions \$)
Studebaker Corp.	50	50.51
Swift & Co.	9	201.48
Texas Corp.	14	135.14
Union Carbide & Carbon Corp.	37	63.19
Union Oil Co. of California	40	57.78
U. S. Rubber Co.	15	134.64
United States Steel Corp.	2	533.26
Vacuum Oil Co.	26	93.12
Westinghouse Electric & Mfg. Co.	16	122.00
Woolworth (F. W.) Co.	46	53.16
Youngstown Sheet & Tube Co.	28	83.36
Totals: 50 Companies (this list)		6,679.66
551 Companies (total list)		11,934.53

**List C—50 Corporations with Largest
Invested Capital**

	Rank	Invest. Capital 1927 (Million \$)
Allied Chemical & Dye Corp.	21	220.86
American Can Co.	39	146.93
American Smelting & Refining Co.	29	185.64
American Sugar Refining Co.	44	136.56
American Tobacco Co.	26	190.88
American Woolen Co.	46	118.28
Anaconda Copper Mining Co.	8	451.82
Armour & Co. (Ill.)	9	417.76
Atlantic Refining Co.	47	117.22
Bethlehem Steel Corp.	7	498.96
Chile Copper Co.	35	154.50
Dodge Bros., Inc.	48	114.88
E. I. duPont de Nemours & Co., Inc. ...	14	313.10
Ford Motor Co.	4	672.12
General Electric Co.	12	340.37

LIST C CONTINUED

	Rank	Invest. Capital 1927 (Millions \$)
General Motors Corp.	3	757.74
Goodyear Tire & Rubber Co.	28	188.17
Gulf Oil Corp. of Pa.	13	317.68
Humble Oil & Refining Co.	32	178.32
International Harvester Co.	20	258.48
International Paper Co.	19	269.75
Jones & Laughlin Steel Corp.	30	182.05
Kennecott Copper Corp.	18	270.26
Liggett & Myers Tobacco Co.	33	165.42
Marland Oil Co.	50	113.73
Pan-American Petrol. & Trans. Co.	23	205.15
Paramount-Famous-Lasky Corp.	38	146.99
Phillips Petroleum Co.	42	138.96
Pittsburgh Coal Co.	36	150.54
Prairie Oil & Gas Co.	37	150.42
Pure Oil Co.	27	188.67
Reynolds (R. J.) Tobacco Co.	41	140.70
Sears, Roebuck & Co.	34	160.39
Sinclair Consolidated Oil Corp.	11	346.24
Standard Oil Co. of California.....	6	551.14
Standard Oil Co. (Indiana)	10	407.64
Standard Oil Co. of New Jersey.....	2	1,297.28
Standard Oil Co. of New York.....	5	622.59
Studebaker Corp.	49	114.52
Swift & Co.	15	295.75
Texas Corp.	16	293.96
Union Carbide & Carbon Corp.	25	201.40
Union Oil Co. of California.....	43	138.35
United Fruit Co.	31	181.03
U. S. Rubber Co.	17	293.87
United States Steel Corp.	1	1,910.13
Vacuum Oil Co.	40	144.53
Westinghouse Electric & Mfg. Co.	22	205.43

CORPORATION PROFITS

LIST C CONCLUDED

	Rank	Invest. Capital 1927 (Millions \$)
Woolworth (F. W.) Co.	45	134.20
Youngstown Sheet & Tube Co.	24	201.49
Totals: 50 Companies (this list).....		15,402.85
551 Companies (total list).....		28,171.97

**List D (Summary)—37 Corporations Common
to Lists A, B and C**

Allied Chemical & Dye Corp.
 American Smelting & Refining Co.
 American Sugar Refining Co.
 American Tobacco Co.
 Anaconda Copper Mining Co.
 Armour & Co. (Ill.).
 Atlantic Refining Co.
 Bethlehem Steel Corp.
 E. I. duPont de Nemours & Co., Inc.
 Ford Motor Co.
 General Electric Co.
 General Motors Corp.
 Goodyear Tire & Rubber Co.
 Gulf Oil Corp. of Pa.
 Humble Oil & Refining Co.
 International Harvester Co.
 Jones & Laughlin Steel Corp.
 Liggett & Myers Tobacco Co.
 Prairie Oil & Gas Co.
 Reynolds (R. J.) Tobacco Co.
 Sears, Roebuck & Co.
 Sinclair Consolidated Oil Corp.
 Standard Oil Co. of California
 Standard Oil Co. (Indiana)
 Standard Oil Co. of New Jersey.
 Standard Oil Co. of New York.

LIST D CONCLUDED

Studebaker Corp.
 Swift & Co.
 Texas Corp.
 Union Carbide & Carbon Corp.
 Union Oil Co. of California.
 U. S. Rubber Co.
 United States Steel Corp.
 Vacuum Oil Co.
 Westinghouse Electric & Mfg. Co.
 Woolworth (F. W.) Co.
 Youngstown Sheet & Tube Co.

Memorandum

List D contains the names of America's largest industrial concerns, in so far as measurement is made either on the basis of total assets, current assets, or invested capital. The only other possible unit of measurement would be gross annual business, and this would be an impractical test for the reason that so small a number of corporations report this important item. It appeals to us as probable, however, that a test on the basis of annual gross would not give results materially different from those set forth in List D.

The Ford Motor Co., having been classified among the largest, must be omitted from further consideration, because it does not make public an intelligible balance sheet and publishes no income account whatsoever.

II—INDUSTRIAL CORPORATIONS POS- SESSING GREATEST CURRENT WEALTH

List E—50 Corporations with Largest Working Capital

(*I. e.*, with greatest excess of current assets over
current liabilities.)

	Rank	Working Cap. 1927 (Million \$)
Allied Chemical & Dye Corp.	9	133.08
American Locomotive Co.	40	48.39
American Smelting & Refining Co.	26	71.55
American Sugar Refining Co.	34	57.67
American Tobacco Co.	13	108.77
American Woolen Co.	30	61.59
Anaconda Copper Mining Co.	24	77.26
Armour & Co. (Ill.)	8	148.97
Atlantic Refining Co.	44	44.02
Bethlehem Steel Corp.	11	19.40
Chrysler Corp.	48	42.38
Corn Products Refining Co.	38	50.98
Deere & Co.	45	43.32
E. I. duPont deNemours & Co., Inc.	29	61.66
Eastman Kodak Co.	35	55.07
Firestone Tire & Rubber Co.	43	46.92
General Electric Co.	4	238.59
General Motors Corp.	3	269.32
Goodrich (B. F.) & Co.	33	58.88
Goodyear Tire & Rubber Co.	19	95.65
Great A. & P. Tea Co. of America	27	67.37
Gulf Oil Corp. of Pa.	20	82.05
Humble Oil & Refining Co.	42	47.36
International Harvester Co.	5	183.63
International Shoe Co.	28	61.88

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LIST E CONCLUDED

	Rank	Working Cap. 1927 (Million \$)
Jones & Laughlin Steel Corp.	32	61.02
Kennecott Copper Corp.	49	40.99
Liggett & Myers Tobacco Co.	12	112.10
Lorillard (P.) & Co.	31	61.32
Montgomery Ward & Co.	46	42.98
Nash Motors Corp.	50	40.61
National Lead Co.	47	42.86
Prairie Oil & Gas Co.	23	79.18
Procter & Gamble Co.	36	52.36
Reynolds(R. J.) Tobacco Co.	10	124.46
Sears, Roebuck & Co.	22	80.27
Standard Oil Co. of California.....	17	101.07
Standard Oil Co. (Indiana)	16	102.58
Standard Oil Co. of New Jersey	1	516.39
Standard Oil Co. of New York	6	177.30
Swift & Co.	7	172.51
Texas Corp.	15	105.20
Union Carbide & Carbon Corp.	37	51.51
Union Oil Co. of California.....	41	48.13
U. S. Rubber Co.	18	98.89
United States Steel Corp.	2	424.34
Vacuum Oil Co.	21	81.35
Westinghouse Electric & Mfg. Co.	14	106.95
Woolworth (F. W.) Co.	39	49.72
Youngstown Sheet & Tube Co.	25	73.10
Totals: 50 Companies (this list).....		5,122.95
551 Companies (total list).....		9,356.82

**List F—51 Corporations with Greatest Amount
of Cash**

	Rank	Cash 1927 (Million \$)
Allied Chemical & Dye Corp.	5	102.07
American Locomotive Co.	12	37.10
American Railway Express Co.	22	28.83
American Smelting & Refining Co.	13	35.38
American Sugar Refining Co.	28	20.57
Anaconda Copper Mining Co.	41	18.06
Armour & Co. (Ill.)	31	19.93
Bethlehem Steel Corp.	7	47.80
Borden Co.	27	20.90
Burroughs Adding Machine Co.	*50	15.80
Chrysler Corp.	16	32.64
Corn Products Refining Co.	10	40.84
Dodge Bros., Inc.	35	19.25
E. I. duPont deNemours & Co., Inc. ...	17	32.60
Eastman Kodak Co.	18	32.41
Fleischmann Co.	24	25.23
General Electric Co.	4	153.76
General Motors Corp.	1	208.18
Goodyear Tire & Rubber Co.	25	24.01
Great A. & P. Tea Co. of America.....	20	31.12
Gulf Oil Corp. of Pa.	46	16.88
International Harvester Co.	9	42.15
International Shoe Co.	49	16.13
Jones & Laughlin Steel Corp.	14	33.58
Kennecott Copper Corp.	37	18.29
Liggett & Myers Tobacco Co.	32	19.87
Marland Oil Co.	36	18.36
Nash Motors Co.	8	42.27
National Biscuit Co.	26	20.59
Packard Motor Car Co.	44	17.29
Phillips Petroleum Co.	48	16.26
Radio Corp. of America	38	18.28

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LIST F CONCLUDED

	Rank	Cash 1927 (Million \$)
Reynolds (R. J.) Tobacco Co.	*50	15.80
Sears, Roebuck & Co.	11	40.20
Standard Oil Co. of California.....	23	26.59
Standard Oil Co. (Indiana).....	6	86.87
Standard Oil Co. of New Jersey.....	3	169.76
Standard Oil Co. of New York.....	45	1.04
Studebaker Corp.	42	17.49
Swift & Co.	34	19.42
Texas Corp.	40	18.11
Timken Roller Bearing Co.	43	17.40
Union Carbide & Carbon Corp.	47	16.27
Union Oil Co. of California.....	39	18.21
United Cigar Stores Co. of America....	30	19.95
United Fruit Co.	21	31.07
United States Steel Corp.	2	180.93
Vacuum Oil Co.	19	32.10
Westinghouse Air Brake Co.	33	19.68
Westinghouse Electric & Mfg. Co.	15	32.97
Woolworth (F. W.) Co.	29	20.42

Totals: 51 Companies (this list)..... 2,028.23

551 Companies (total list)..... 3,603.53

* Two companies with the same amount of cash ranked number 50 on this list; therefore, both were included.

List G—36 Corporations Common to Lists E and F

Allied Chemical & Dye Corp.
 American Locomotive Co.
 American Smelting & Refining Co.
 American Sugar Refining Co.
 Anaconda Copper Mining Co.
 Armour & Co. (Ill.).
 Bethlehem Steel Corp.

LIST G CONCLUDED

Chrysler Corp.
Corn Products Refining Co.
E. I. duPont deNemours & Co., Inc.
Eastman Kodak Co.
General Electric Co.
General Motors Corp.
Goodyear Tire & Rubber Co.
Great A. & P. Tea Co. of America.
Gulf Oil Corp. of Pa.
International Harvester Co.
International Shoe Co.
Jones & Laughlin Steel Co.
Kennecott Copper Corp.
Liggett & Myers Tobacco Co.
Nash Motors Co.
Reynolds (R. J.) Tobacco Co.
Sears, Roebuck & Co.
Standard Oil Co. of California.
Standard Oil Co. (Indiana).
Standard Oil Co. of New Jersey.
Standard Oil Co. of New York.
Swift & Co.
Texas Corp.
Union Carbide & Carbon Corp.
Union Oil Co. of California.
United States Steel Corp.
Vacuum Oil Co.
Westinghouse Electric & Mfg. Co.
Woolworth (F. W.) Co.

**List H (Summary)—28 Corporations Common to
Lists D (Largest) and G (Greatest
Current Wealth)**

Allied Chemical & Dye Corp.
American Smelting & Refining Co.
American Sugar Refining Co.
Anaconda Copper Mining Co.
Armour & Co. (Ill.).
Bethlehem Steel Corp.
E. I. duPont deNemours & Co., Inc.
General Electric Co.
General Motors Corp.
Goodyear Tire & Rubber Co.
Gulf Oil Corp. of Pa.
International Harvester Co.
Jones & Laughlin Steel Corp.
Liggett & Myers Tobacco Co.
Reynolds (R. J.) Tobacco Co.
Sears, Roebuck & Co.
Standard Oil Co. of California.
Standard Oil Co. (Indiana).
Standard Oil Co. of New Jersey.
Standard Oil Co. of New York.
Swift & Co.
Texas Corp.
Union Carbide & Carbon Corp.
Union Oil Co. of California.
United States Steel Corp.
Vacuum Oil Co.
Westinghouse Electric & Mfg. Co.
Woolworth (F. W.) Co.

Memorandum

List G, being a composite of Lists E and F, reports the names of those corporations which have BOTH the largest working capital and the largest cash. In other words,

they possess the greatest amount of current wealth. For brevity, they may be referred to as the WEALTHIEST industrial concerns.

List H, being a composite of Lists D and G, reports the names of those concerns which by three separate tests were selected as the largest, and which at the same time, by two separate tests, were selected as possessing the greatest current wealth. List H, in other words, reports the names of the LARGEST AND WEALTHIEST industrial corporations in this country.

III—INDUSTRIAL CORPORATIONS WITH LARGEST EARNINGS

List I—50 Corporations with Largest Net Profit

		Net Profit 1927 (Million \$)
	Rank	
Allied Chemical & Dye Corp.	16	\$24.59
American Can Co.	47	13.06
American Smelting & Refining Co.	28	17.99
American Tobacco Co.	18	23.31
Anaconda Copper Mining Co.	17	*23.50
Bethlehem Steel Corp.	11	27.29
Chile Copper Co.	44	*13.45
Chrysler Corp.	23	19.68
Curtis Publishing Co.	32	17.27
Dodge Bros., Inc.	45	13.44
E. I. duPont deNemours & Co., Inc.	5	46.04
Eastman Kodak Co.	22	20.14
Firestone Tire & Rubber Co.	41	14.45
Fleischmann Co.	26	18.86
General Electric Co.	4	49.08
General Motors Corp.	1	235.11
Gillette Safety Razor Co.	40	14.58
Goodrich (B. F.) & Co.	37	15.71
Goodyear Tire & Rubber Co.	25	19.59

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	Rank	Net Profit 1927 (Million \$)
Great A. & P. Tea Co. of America.....	27	18.41
Gulf Oil Corp. of Pa.	30	17.54
Hudson Motor Car Co.	43	14.28
International Harvester Co.	14	25.07
International Shoe Co.	29	17.70
Kennecott Copper Corp.	10	*28.64
Kresge (S. S.) Co.	42	14.34
Liggett & Myers Tobacco Co.	21	20.46
Montgomery Ward & Co.	46	13.13
Nash Motors Co.	19	22.67
National Biscuit Co.	35	16.28
Pan-American Petrol. & Trans. Co.	31	17.36
Paramount-Famous-*Lasky Corp.	50	12.50
Procter & Gamble Co.	38	15.01
Reynolds (R. J.) Tobacco Co.	9	29.08
Sears, Roebuck & Co.	15	25.02
Sinclair Consolidated Oil Corp.	48	12.98
Standard Oil Co. of California.....	6	40.21
Standard Oil Co. (Indiana)	8	*30.13
Standard Oil Co. of New Jersey.....	3	58.26
Standard Oil Co. of New York.....	33	17.15
Swift & Co.	36	15.82
Texas Corp.	20	20.61
Union Carbide & Carbon Corp.	12	26.54
United Fruit Co.	24	19.62
U. S. Rubber Co.	49	12.54
United States Steel Corp.	2	105.97
Utah Copper Co.	39	*14.59
Vacuum Oil Co.	13	25.56
Westinghouse Electric & Mfg. Co.	34	17.14
Woolworth (F. W.) Co.	7	35.52
Totals: 50 Companies (this list).....		1,387.27
551 Companies (total list).....		2,529.90

* Company reported net profit before depletion.

List J—50 Corporations with Largest Net Income

	Rank	Net Income 1927 (Million \$)
Allied Chemical & Dye Corp.	15	24.59
American Can Co.	41	13.06
American Radiator Co.	49	11.49
American Smelting & Refining Co.	31	15.48
American Tobacco Co.	16	23.26
Bethlehem Steel Corp.	29	15.83
Chrysler Corp.	21	19.49
Consol. Mining & Smelting Co., Ltd. ..	47	11.75
Corn Products Refining Co.	46	11.91
Curtis Publishing Co.	26	17.27
E. I. duPont deNemours & Co., Inc. ...	4	45.95
Eastman Kodak Co.	18	20.14
Firestone Tire & Rubber Co.	37	13.72
Fleischmann Co.	22	18.86
General Electric Co.	3	48.80
General Motors Corp.	1	235.11
Gillette Safety Razor Co.	34	14.58
Goodrich (B. F.) & Co.	42	12.78
Goodyear Tire & Rubber Co.	39	13.14
Great A. & P. Tea Co. of America.	24	18.41
Gulf Oil Corp. of Pa.	38	13.71
Hudson Motor Car Co.	35	14.28
International Harvester Co.	14	24.75
International Shoe Co.	25	17.70
Kennecott Copper Corp.	10	*28.13
Kresge (S. S.) Co.	36	13.98
Liggett & Myers Tobacco Co.	23	18.74
Montgomery Ward & Co.	40	13.13
Nash Motors Co.	17	22.67
National Biscuit Co.	28	16.28
Packard Motor Car Co.	48	11.74
Pan-American Petrol. & Trans. Co. ...	27	16.91

LIST J CONCLUDED

	Rank	Net Income 1927 (Million \$)
Procter & Gamble Co.	32	15.01
Reynolds (R. J.) Tobacco Co.	9	29.08
Sears, Roebuck & Co.	13	25.02
Standard Oil Co. of California.....	6	40.21
Standard Oil Co. (Indiana)	8	*30.13
Standard Oil Co. of New Jersey	5	40.42
Standard Oil Co. of New York	50	11.41
Studebaker Corp.	45	11.94
Swift & Co.	43	12.20
Texas Corp.	19	20.03
Texas Gulf Sulphur Co.	44	*12.10
Union Carbide & Carbon Corp.	12	25.34
United Fruit Co.	20	19.62
United States Steel Corp.	2	87.90
Utah Copper Co.	33	*14.59
Vacuum Oil Co.	11	25.56
Westinghouse Electric & Mfg. Co.	30	15.64
Woolworth (F. W.) Co.	7	35.35

Totals: 50 Companies (this list).....	1,289.19
551 Companies (total list).....	2,264.54

* Company reported net income before depletion.

**List K—44 Corporations Common to
Lists I and J**

Allied Chemical & Dye Corp.
 American Can Co.
 American Smelting & Refining Co.
 American Tobacco Co.
 Bethlehem Steel Corp.
 Chrysler Corp.
 Curtis Publishing Co.
 E. I. duPont deNemours & Co., Inc.

LIST K CONCLUDED

Eastman Kodak Co.
Firestone Tire & Rubber Co.
Fleischmann Co.
General Electric Co.
General Motors Corp.
Gillette Safety Razor Co.
Goodrich (B. F.) & Co.
Goodyear Tire & Rubber Co.
Great A. & P. Tea Co. of America
Gulf Oil Corp. of Pa.
Hudson Motor Car Co.
International Harvester Co.
International Shoe Co.
Kennecott Copper Corp.
Kresge (S. S.) Co.
Liggett & Myers Tobacco Co.
Montgomery Ward & Co.
Nash Motors Co.
National Biscuit Co.
Pan-American Petroleum & Trans. Co.
Procter & Gamble Co.
Reynolds (R. J.) Tobacco Co.
Sears, Roebuck & Co.
Standard Oil Co. of California
Standard Oil Co. (Indiana).
Standard Oil Co. of New Jersey.
Standard Oil Co. of New York.
Swift & Co.
Texas Corp.
Union Carbide & Carbon Corp.
United Fruit Co.
United States Steel Corp.
Utah Copper Co.
Vacuum Oil Co.
Westinghouse Electric & Mfg. Co.
Woolworth (F. W.) Co.

List L (Summary)—23 Corporations Common to
Lists H and K

Allied Chemical & Dye Corp.
American Smelting & Refining Co.
Bethlehem Steel Corp.
E. I. duPont deNemours & Co., Inc.
General Electric Co.
General Motors Corp.
Goodyear Tire & Rubber Co.
Gulf Oil Corp. of Pa.
International Harvester Co.
Liggett & Myers Tobacco Co.
Reynolds (R. J.) Tobacco Co.
Sears, Roebuck & Co.
Standard Oil Co. of California
Standard Oil Co. (Indiana).
Standard Oil Co. of New Jersey.
Standard Oil Co. of New York.
Swift & Co.
Texas Corp.
Union Carbide & Carbon Corp.
United States Steel Corp.
Vacuum Oil Co.
Westinghouse Electric & Mfg. Co.
Woolworth (F. W.) Co.

Memorandum

List K reports the corporations which, judged on the basis of either net profit or net income, had the largest earnings in 1927. (Net income, it will be recalled, is equivalent to net profit minus fixed charges.)

List L, a composite of a number of preceding lists, reports the 23 corporations which, according to the tests that have been applied, were at the same time the LARGEST, WEALTHIEST and possessed the GREATEST EARNING POWER.

IV—INDUSTRIAL CORPORATIONS WITH LARGEST PAYMENTS TO SECURITY OWNERS—"THE FIFTY CLUB"

List M—50 Corporations with Largest Total Payments to Their Security Owners

	Rank	Payments 1927 (Million \$)
Allied Chemical & Dye Corp.	20	\$15.82
American Locomotive Co.	50	8.86
American Smelting & Refining Co.	35	10.89
American Tobacco Co.	15	18.83
Anaconda Copper Mining Co.	11	22.38
Armour & Co. (Ill.)	13	20.45
Bethlehem Steel Corp.	16	18.25
Chile Copper Co.	27	13.38
Chrysler Corp.	42	10.04
Corn Products Refining Co.	48	9.46
Curtis Publishing Co.	22	14.85
Dodge Bros., Inc.	47	9.66
E. I. duPont deNemours & Co., Inc. ...	4	40.85
Eastman Kodak Co.	18	16.81
Fleischmann Co.	19	15.82
General Electric Co.	5	37.10
General Motors Corp.	1	143.95
Gillette Safety Razor Co.	43	10.00
Goodyear Tire & Rubber Co.	30	12.10
Gulf Oil Corp. of Pa.	39	10.47
International Harvester Co.	32	11.41
International Paper Co.	37	10.55
Kennecott Copper Co.	10	23.03
Liggett & Myers Tobacco Co.	28	13.34
Nash Motors Co.	26	13.65
National Biscuit Co.	23	14.53
Pan-American Petrol. & Trans. Co....	24	13.90
Paramount-Famous-Lasky Corp.	46	9.70

LIST M CONCLUDED

	Rank	Payments 1927 (Million \$)
Procter & Gamble Co.	33	\$11.09
Reynolds (R. J.) Tobacco Co.	9	26.00
Sears, Roebuck & Co.	38	10.50
Sinclair Consol. Oil Corp.	49	8.95
Standard Oil Co. of California.....	6	33.06
Standard Oil Co. (Indiana).....	8	32.13
Standard Oil Co. of New Jersey.....	3	56.41
Standard Oil Co. of New York.....	7	32.93
Studebaker Corp.	44	9.90
Swift & Co.	21	15.62
Texas Corp.	12	21.76
Texas Gulf Sulphur Co.	40	10.16
Union Carbide & Carbon Corp.	17	17.16
Union Oil Co. of California	36	10.74
United Fruit Co.	25	13.75
U. S. Rubber Co.	31	11.52
United States Steel Corp.	2	93.10
Utah Copper Co.	45	9.75
Vacuum Oil Co.	29	12.56
Westinghouse Electric & Mfg. Co.	34	10.98
Woolworth (F. W.) Co.	14	19.67
Youngstown Sheet & Tube Co.	41	10.06
Totals: 50 Companies (this list)		1,047.88
551 Companies (total list)....		1,918.61

**List N—42 Corporations Common to
Lists I and M**

(List I, it will be recalled, reports the 50 concerns which
had the largest net profit last year.)

Allied Chemical & Dye Corp.
American Smelting & Refining Co.
American Tobacco Co.
Anaconda Copper Mining Co.

LIST N CONTINUED

Bethlehem Steel Corp.
Chile Copper Co.
Chrysler Corp.
Curtis Publishing Co.
Dodge Bros., Inc.
E. I. duPont deNemours & Co., Inc.
Eastman Kodak Co.
Fleischmann Co.
General Electric Co.
General Motors Corp.
Gillette Safety Razor Co.
Goodyear Tire & Rubber Co.
Gulf Oil Corp. of Pa.
International Harvester Co.
Kennecott Copper Co.
Liggett & Myers Tobacco Co.
Nash Motors Co.
National Biscuit Co.
Pan-American Petroleum & Trans. Co.
Paramount-Famous-Lasky Corp.
Procter & Gamble Co.
Reynolds (R. J.) Tobacco Co.
Sears, Roebuck & Co.
Sinclair Consolidated Oil Corp.
Standard Oil Co. of California.
Standard Oil Co. (Indiana).
Standard Oil Co. of New Jersey.
Standard Oil Co. of New York.
Swift & Co.
Texas Corp.
Union Carbide & Carbon Corp.
United Fruit Co.
U. S. Rubber Co.
United States Steel Corp.
Utah Copper Co.

LIST N CONCLUDED

Vacuum Oil Co.
Westinghouse Electric & Mfg. Co.
Woolworth (F. W.) Co.

**List O (Summary)—24 Corporations Common to
Lists H and N—"The 1927 Fifty Club."**

Allied Chemical & Dye Corp.
American Smelting & Refining Co.
Anaconda Copper Mining Co.
Bethlehem Steel Corp.
E. I. duPont de Nemours & Co.
General Electric Co.
General Motors Corp.
Goodyear Tire & Rubber Co.
Gulf Oil Corp. of Pa.
International Harvester Co.
Liggett & Myers Tobacco Co.
Reynolds (R. J.) Tobacco Co.
Sears, Roebuck & Co.
Standard Oil Co. of California.
Standard Oil Co. (Indiana).
Standard Oil Co. of New Jersey.
Standard Oil Co. of New York.
Swift & Co.
Texas Corp.
Union Carbide & Carbon Corp.
United States Steel Corp.
Vacuum Oil Co.
Westinghouse Electric & Mfg. Co.
Woolworth (F. W.) & Co.

Memorandum

List O is the culmination of all preceding basic tables. It contains the names of the corporations which are common to all preceding summary lists, except List K,

which reported the concerns that had both the largest net profit and the largest net income. It was necessary to omit List K from consideration in Table IV because this table deals with TOTAL payments to security owners. It would have been proper to have included List K in the cumulative list immediately above only in the event that, in Table IV, we had been considering merely dividend payments—rather than dividend payments plus interest payment to bondholders.

List O, in other words, reports the names of the corporations which, according to the tests that we applied, were the LARGEST, WEALTHIEST, EARNED THE GREATEST NET PROFIT AND MADE THE LARGEST PAYMENTS TO THEIR SECURITY OWNERS.

If there is any meaning at all in the term "The Fifty Club" which has been good-humoredly suggested, it must be applied to this list—America's premier industrial concerns which emerge from various lists of 50 and which, on the basis of the MAGNITUDE of their property, their readily convertible wealth, their earning power, and their disbursements to their stock and bond holders, are the select of the select.

Common Stock Values

A supplementary series of calculations has been made, showing how those who have held the common stocks of "The 1927 Fifty Club" over the past 10 years have fared. For this supplementary tabulation it was necessary to omit Allied Chemical, Goodyear, Gulf Oil, and Union Carbide, because their complete records are not available back as far as 1918.

The holder of one share of common stock of each of the other 20 corporations on the list at the beginning of 1918 would hold 182.57 shares at present, without investing one cent of additional capital. He would have only accepted the stock dividends that fell into his lap,

and have converted the monetary value of his rights into additional common stock.

His 20 shares of original stock at the beginning of 1918 would have cost him \$3,979. Their equivalent current market value (as of November 1, 1928) is \$19,895, or an increase of 400 per cent. The market value of all stocks on the New York Stock Exchange, as reflected by the generally used indexes, has increased only about 215 per cent since the beginning of 1918.

V—INDUSTRIALS WITH LARGEST EARNINGS ON INVESTED CAPITAL

List P—50 Corporations with Highest Percentage Earnings on Invested Capital

	Rank	% Earned on Invest. Cap. 1927
Borg & Beck Co.	24	27.70%
Burroughs Adding Machine Co.	42	21.67
Canada Dry Ginger Ale, Inc.	4	57.80
Caterpillar Tractor Co.	28	26.60
Cerro de Pasco Copper Corp.	6	54.60
Certo Corp.	20	29.36
Chrysler Corp.	37	23.40
Coca-Cola Corp.	31	26.21
Commercial Solvents Corp.	30	26.40
Congress Cigar Co.	12	40.64
Consol. Mining & Smelt. Co., Ltd. ...	9	45.30
Coty, Inc.	3	60.40
Curtis Publishing Co.	7	54.25
Electric Auto-Lite Co.	11	41.30
Eureka Vacuum Cleaner Co.	21	28.54
Evans Auto Loading Co.	23	28.07
Fanny Farmer Candy Shops, Inc.	47	21.13
Fleischmann Co.	15	36.80
Forhan Co.	33	25.60

LIST P CONCLUDED

	Rank	% Earned on Invest. Cap. 1927
Freeport Texas Co.	26	27.20%
Gabriel Snubber Mfg. Co.	10	42.90
General Baking Corp.	27	26.89
General Motors Corp.	19	31.00
Gillette Safety Razor Co.	17	33.31
Gold Dust Corp.	25	27.27
Gotham Silk Hosiery Co.	48	21.10
Grant (W. T.) Co.	41	22.31
Great A. & P. Tea Co. of America....	43	21.65
Great Lakes Dredge & Dock Co.	40	22.40
Hecla Mining Co.	13	39.30
Hollander (A) & Son, Inc.	45	21.40
Jewel Tea Co.	22	28.20
Kroger Grocery & Baking Co.	36	23.72
Lambert Co.	1	181.10
Life Savers, Inc.	14	37.75
Maytag Co.	5	57.20
Melville Shoe Corp.	35	24.29
Montgomery Ward & Co.	46	21.22
Nash Motors Co.	8	47.60
Packard Motor Car Co.	39	23.00
Penney (J. C.) Co.	32	25.61
Postum Co., Inc.	16	36.50
Pratt & Lambert, Inc.	44	21.60
Radio Corp. of America.....	38	23.24
Schulte Retail Stores.....	49	20.81
Stewart-Warner Speedometer Corp. ..	50	20.79
Texas Gulf Sulphur Co.	2	70.00
Timken Roller Bearing Co.	18	32.30
Woolworth (F. W.) Co.	29	26.48
Wrigley (Wm. Jr.) Co.	34	25.48
Averages:		
50 Companies (this list).....		30.31%
551 Companies (total list)		8.98%

List Q—9 Corporations Common to Lists I and P

(List I shows 50 concerns with greatest net profit, on a dollar basis.)

Chrysler Corp.
Curtis Publishing Co.
Fleischmann Co.
General Motors Corp.
Gillette Safety Razor Co.
Great A. & P. Tea Co. of America.
Montgomery Ward & Co.
Nash Motors Co.
Woolworth (F. W.) Co.

Memorandum

It will be observed that in Table V the basis of consideration is quite different from that of the preceding tables. In the preceding ones, only magnitude of property, wealth, earnings, and payments was considered. In the present table, the percentage of earnings in relation to invested capital is taken into account.

It is extremely interesting to note that only 9 concerns which appeared on the list of 50 with the greatest magnitude of net profit appeared also on the list that showed the highest PERCENTAGE earnings. The two ideas should not be confused. The first has reference to magnitude in terms of dollars; the second has reference alone to the relationship between earnings and invested capital.

In a Class by Themselves

Of the total of 122 different corporations which have been named one or more times in the

preceding 17 lists, only 2 are common to *all* lists. They are:

GENERAL MOTORS CORP.

WOOLWORTH (F. W.) Co.

Not only do these two concerns take their places among those that are the largest, that are the wealthiest, that have the largest dollar earnings, and that make the largest disbursements to their security owners, but they further take their places on the list of those concerns that have the largest *percentage* earnings on their invested capital.

This is a rare distinction. If the corporation "Fifty Club" is composed of those concerns which meet all tests on the basis of magnitude, it will assuredly be necessary to inaugurate some sort of inner circle for General Motors and Woolworth, which meet a still further test.

And as these various lists are brought up to date with the release of new annual data in the future, it will be of transcending interest to observe whether General Motors and Woolworth hold their places of unique distinction, and also what new candidates present themselves for admission to this *superlatively* select group.

CHAPTER XVI

FROM AN AEROPLANE

IN THIS concluding chapter no attempt will be made at a detailed summarization of the data which have been previously presented. The whole of the foregoing study was in more or less summary form, and an effort to summarize again would result in nothing more than restatement.

Rather, the present purpose is to take a bird's-eye, or aeroplane, view of the data as a whole, and thus looking at them in panorama, to develop certain pertinent facts which either have not been touched upon at all or may have been dealt with rather too briefly.

Especially are there three aspects of the study which appear to justify enlarged discussion: (a) the basic factors which have influenced or shaped the presented data; (b) their adequacy, their fallibility, and their confusion; (c) the interest of security owners and various other groups in the adequacy and reliability of data of this type. These particular phases of the problem will be considered in the order named. Also,

following certain further lamentations relative to the character of the average corporation statement, we shall present what, in our opinion, is the "ideal" form for such a statement.

Basic Factors Which Have Influenced the Data.

—In the preceding pages our mathematical data reported that some corporations are rich and others poor; some return high earnings and some low earnings or deficits; some make large payments to their security holders and others make small payments or none; some have adequate working capital and others inadequate; some are physically big and strong and others are feeble, etc., etc.

It is inevitable that one should question *why*, and it is likewise inescapable that an answer should be essayed in a study such as this.

Not a conclusive answer and not an inclusive one. The question is much too broad to be reduced to the simple proportions of a catechism. To answer it precisely and comprehensively is one of the main functions of that entire branch of learning known as economics.

But a partial and tentative answer—an answer which should be a part of the whole, but which at the same time must, for the most part, look to the actual data presented in this particular study for its validation.

Economic Change.—Predominant throughout all economic affairs is the element of *change*. To understand the reasons for, and the effects of change is the task of the theoretical student of business phenomena. To be able to foresee change, to recognize the symptoms which foreshadow it and to forecast its consequences, is the function of him who risks his capital in business enterprise—either as a sole proprietor, as an active partner, or as a security holder.

In the main, it has been the inability either to foresee, to forestall, or to circumvent the effects of economic change which has been responsible for the majority of business disappointments that have been statistically reported in the preceding chapters. Correspondingly, it has been the good fortune wrought by change, the alertness, the wisdom, and the foresight which has made it possible to take full advantage of shifting conditions, which has been responsible for the more conspicuous successes indicated.

But one does not answer the question as to why some corporations are prosperous and others unprosperous by the specious statement that conditions change. Economic change appears in many forms and fashions. Our interest here is in discovering the particular type of change which is at once responsible for the greatest amount of ill and well-being.

Cyclical Change.—In its most violent and all-embracing form, economic change asserts itself in what are known as major cyclical swings in general business activity—those great, inclusive swings from prosperity to depression and back again which affect all lines of business activity to some degree, and most lines to a considerable degree.

The statistics which are here under scrutiny, covering only the two-year period, 1926-1927, give no *direct* evidence of those great cyclical movements which have occurred from time to time in the past, and which in all likelihood will recur from time to time in the future. They do reveal a certain amount of *indirect* evidence; perhaps as many as half a hundred balance sheets and income accounts which have been studied still bear the scars of the 1920-1921 depression.

But it still remains true that the statistical evidence which has been presented neither grants the authority nor imposes the obligation to explain cyclical changes in business prosperity. The years 1926 and 1927 were not boom years for American business, but they can be conservatively characterized as years of moderate and widespread prosperity. The present task is to report some specific and plausible rea-

sons for the fact that the results of corporate activity varied so widely in those two years.

Why is there, concurrently, super-prosperity on the one hand and actual poverty on the other hand in a typical period of moderate average prosperity? In this aspect, the problem becomes considerably narrowed.

There are several pertinent factors which on their faces appear to be of considerable importance, but which in reality must be dealt with as basic assumptions or as effects, rather than as underlying causes. Among these are the following:

Ability of Management.—It is, of course, true that the ability of business management varies from excellence down through mediocrity to stupidity. But having made that statement, one has said no more than that there are both wise men and fools in the world—hardly a startling discovery.

In any study of the results achieved by large corporations, it is a foregone conclusion that excellent management, all things being equal, will achieve greater gains than stupid management. And there is no doubt whatsoever that the variation in the ability of management has to some extent wrought its influence upon the data which have been presented.

But it is easier to overestimate than to under-

estimate the importance of this factor, so far as it bears upon the present case. In the average large corporation with numerous stockholders incessantly clamoring for dividends, incompetent management does not endure. Either the weak management itself is changed at the instigation of the stockholder, or the concern which is cursed with it folds its tent and leaves the field to others.

Thus, over a period of time, the elimination of weak management is automatic. With a group of leading corporations such as we have been studying, it must be assumed that, on the average, the ability of management ranges from good to excellent—that really incompetent management is exceptional, and of brief duration.

And while not denying that excellent management will achieve more brilliant results than merely good management, we incline toward the belief that in the present case the factor is of secondary rather than of primary importance.

Resources.—Undeniably, the financial resources which are available to a given concern have a bearing upon its success. But it is begging the question to assert that Corporation A is successful because it commands adequate financial resources and that Corporation B is unsuccessful because its resources are inade-

quate. How did A's resources become adequate, and *why* are B's inadequate?

The financial resources of a given corporation may be as much a result of economic developments as a cause of them. In some individual cases the problem is important. But a successful concern can normally obtain all of the financial backing that it needs, and one which promises future success is in almost an equally favorable position. Thus resources become more an accompaniment of corporate success than a cause of it.

Luck—Changes in Consumer Preference.—

There are some cynics who maintain that in most cases corporations are successful merely because they are lucky, and unsuccessful merely because they are unlucky. Perhaps there is a greater amount of truth in their contention than most managements of successful concerns would be willing to admit. But no statistical devices have yet been invented for measuring chance of this type. So while admitting that luck can modify ultimate results, we must assume an average horseshoe for the average corporation.

Closely akin to the unaccountable gyrations in the business roulette wheel is the constant shift in consumer preference. The changes of styles in ladies' apparel and appearance, which began to appear a few years ago, have certainly

proved disastrous for the broadsilk, cotton hosiery, corset, and hairpin manufacturers. The shift from high topped shoes for a time profoundly disturbed certain branches of the leather tanning industry.

The shift in 1927 and 1928 from the battery operated radio sets to the AC set left desolation in one branch of the radio industry and brought the flood tide of success to another section.

Scores of other examples could be cited—not merely of individual concerns, but of entire lines of industry which have been for a time vitally affected by the fickleness of human wants or by rapid new technical developments.

But ordinarily such economic changes affect the minor industry more than the major one. And one of the differences between a successful concern and an unsuccessful one is that the former can either foresee these changes or can promptly readjust its operation so that it can take advantage of them, rather than to be defeated by them.

Changes of this type are important in numerous specific cases, but we do not believe them to be extremely important in the aggregate, for the reason that business as a whole continues progressively prosperous—which it could not do were it true that such changes vitally affected other than a minority of the community.

Competition.—Nor are we inclined to lodge much confidence in the frequent reference to competition as an explanation of the cause of radical variations in corporate achievement.

We know of no line of business which is non-competitive. Business in the aggregate is highly competitive. To explain any phase of business activity on the basis of competition is to do not much more than to state that the predominant characteristic of business is business.

And further, competition is more of an effect than a cause. Before business situations can be explained by competition, the underlying reasons for the degree of competition which obtains must be explained.

Thus, both individually and together, all of the factors cited in the foregoing have a bearing upon the variations in corporations' results. Some of them, as has been suggested, merely reflect situations rather than initiate them. Others are secondary rather than primary. Underlying the whole there is something that is still more basic. Our thesis is this:

The Thesis

(1) The natural resources of the world—not only minerals, but productive land as well—are chronically in a state of overdevelopment.

(2) *This overdevelopment is inevitable in any economy dominated by the profits motive.*

(3) *It becomes especially marked in a country such as the United States, where the mineral resources themselves are virtually limitless; where the fecundity of the soil responds readily to agricultural efforts; where land is still relatively cheap, and where exploration, discovery, and development have for many years been a high adventure as well as a business undertaking; where the average worker is an industrious and reasonably intelligent worker; and where the common store of technical knowledge and the obtainable store of technical mechanical equipment is greater than that which has ever been the heritage of any other society.*

(4) *The inability to control the annual supplies of the products of natural resources—mineral and vegetable—constitutes one of the chief (although, of course, not the only) reasons why certain basic lines of industry that are closely allied with raw materials can be depressed while “business as a whole” remains generally prosperous.*

(5) *And further, these same facts (chronic overdevelopment and inability to control certain phases of this overdevelopment) constitute likewise one of the chief explanations of the inor-*

dinate prosperity which certain other lines have enjoyed during recent years.

Indisputable Overdevelopment in Some Lines.—

Several volumes could be written in defense of this opinion; several others could be written in its refutation. Here there is opportunity to touch upon—and then but briefly—only three aspects of the argument: the fact of overdevelopment of natural resources; its malevolent effects upon some lines; its benevolent effect upon others.

We take it that there is no question whatsoever that agriculture, as a whole, is overdeveloped—that more agricultural goods are produced in a normal year than the markets will absorb at prices which the farmer regards as reasonable. If any other situation obtained, McNary-Haugenism and so-called “farm relief” could not have become both political and economic issues.

We take it that there is no question that the coal industry has given continuous evidence of overdevelopment since 1920; that there was too much lead in 1927; too much copper in 1923-1926; too much sugar in 1926-1927; too much crude rubber in certain months of 1926 and 1928; too much oil in 1926-27-28; too much leather in 1925-1926, etc., etc.

If anyone is inclined to dispute these facts, he

need only consult the price record. There was not more of these goods at any time than the markets would absorb, but there was more of them at particular times than the markets would absorb at prices which would bestow prosperity upon their producers.

And why, indeed, should not such goods be either actually or potentially in chronic oversupply?

The Oil Industry's Experience.—Take the problem in its simplest term, as it has been thrown into bold relief during recent years by the epidemic of town lot oil drilling in the Signal Hill district of California.

Citizen A owns a small lot there, upon which he has erected for himself a modest cottage. Oil is discovered in the district—abundant oil. Citizen A enters into an agreement by which Operator X sinks a line of pipe in A's backyard. They strike oil. What is A going to do about it?

He is not going to worry much about the commonweal. He is not going to worry much about the economic welfare of the oil industry as a whole, and least of all is he going to worry about, say, the welfare of the Standard Oil Company of California.

What he is going to do is to cash in upon his good fortune—and as promptly as possible. He is going to get as much oil from beneath his

backyard as he can, before his neighbors drain the pool. He is going to take whatever price he can get. If he can get \$2 a barrel, so much the better. If he can get only 50 cents a barrel, because of general current overproduction of oil, he is going to take that 50 cents—and be better off, personally, than he was before his backyard was drilled.

The Pressure to Realize.—This is an extreme example, but all the more illuminating because it is extreme. Perhaps it may even constitute a crude, homely epic of the experience of the raw material industries of this country.

Owning the land and not much else, about all the farmer can do with it is to crop it—regardless of the extent of his rewards. He is relatively rich when he can market his wheat at \$2 per bushel or more; relatively poor when he markets it at \$1. But to grow the wheat and market it at \$1, or at 90 cents, or perhaps at 80 cents, is better than to let the land lie fallow. *Always there is the economic pressure somehow to carry on.*

And if minerals are discovered beneath the land which nourishes the wheat, the owner perforce must either work them himself or sell them to someone who will do so. In either case, the individual owner must be better off than he was before the minerals were discovered.

The "someone" who buys may be a large corporation, already controlling and working other similar deposits. The problem does not change basically; it changes only in degree. Here is more potential wealth that has come into sight.

The new buyer makes an investment in it. His purpose is to realize a profit thereby. At what price level is it better for him to produce from the property, even in a glutted, falling market, than to close it down and let his investment lie idle?

Someone Always Willing to Produce.—Here again there is the constant economic pressure to carry on—if not on the most favorable terms, then on any terms that fall a hair's-breadth short of ruination. And in both the cropping of the land and the extraction of its mineral resources the problem is all the more complicated by the fact that production costs vary so widely.

The price level at which nobody wants to produce has never been reached—it is an economic impossibility.

And the fact that someone is always willing to produce on the going terms provides the initiative for constant exploration and development; the fact that our national resources have already been developed so amply gives the incentive for production by many owners, sometimes on oner-

ous terms. This tends to delimit the profits of all.

We believe it a reasonable assumption that slowly—very slowly—the mineral resources of the United States are passing under firmer control; out of weak hands into strong hands. It is the long pocketbook that makes strong hands, and that is why strong hands can afford to hold the production urge somewhat in restraint.

Obviously, if one copper company owned all of the copper mines in the world, it would produce only so much copper as it could market at a profit, and not an ounce more than that. The remainder would be retained for future exploitation.

But obviously also, if one big company should control only 60 per cent of supply, and if ownership of the other 40 per cent were distributed among, say, several thousand individual owners, the problem takes a different aspect—it becomes a question of what income is better than no income.

Ultimately (perhaps many years hence) the mineral resources of the world will have all passed into strong hands—hands that can afford to bide their time. The hour of the raw material producers will then have struck. They will begin to collect for the public service they have been rendering during recent years. But in the

meantime one finds evidence of only a beginning. For some years to come, recurrent cycles of overproduction of minerals (perhaps slowly decreasing in intensity) appear inevitable.

Farm Control Is Insecure.—For agriculture the case is much less clear. During the past three years there has been witnessed the collapse of many ambitious programs for agricultural control. Even should the land itself be brought sometime under firmer ownership, the rain and sunshine and heat and frost, the whims of Demeter, must remain beyond control. As was pointed out in the earlier analysis of the inventory situation, those who are closely allied with agricultural production face a perennial hazard—one which can be greatly alleviated by intelligent operation, but which can never be completely eliminated.

Not only the producers of raw materials suffer the effects of overdevelopment in periods of plethoric production (which, of course, do not occur in all raw material lines at the same time), but likewise the manufacturers closely allied with raw material prices suffer the same effects. The tire manufacturers lose heavily when crude rubber prices fall; the cotton goods producers lose when raw cotton prices fall; the gasoline producers lose when crude oil prices fall; etc., etc.

All along the line, both primary and secondary producers win, temporarily at least, when raw material prices rise. But the significant point is that during recent years, due to the feebleness of aggregate control, low average raw material prices have been more frequent than high ones.

"Value Added."—Now let us look for a moment at the position of the manufacturer who has placed a considerable distance, in point of price, between the raw material markets and his own products.

Economic terminology has an awkward but expressive phrase. It speaks of the "value added" by the various processes of production. For example, the copper mining concern that lifts the ore to the surface and delivers it to the smelter adds a certain amount of value—merely by placing it in a position where it can be utilized.

The smelter adds more value.

The brass mill which alloys the refined metal and molds it, say, into brass door knobs, adds more value—considerably more. With refined copper selling at 16 cents per pound, well made and artistically designed brass door knobs might readily sell for \$2 per pound or more.

And the maker of watches obviously adds much more value to a pound of copper than does the door-knob caster. In the form of correctly

functioning movements, the price per pound of copper runs into three figures.

It is self-evident, then, that in specific enterprises the degree of suffering occasioned by periods of overproduction of raw materials tends to decrease as the value added by manufacturing increases. In a period of falling copper prices, the wire manufacturer will probably suffer more than the door-knob manufacturer, and the door-knob manufacturer will suffer more than the watchmaker.

This does not mean that all watchmakers are successful, or that the average copper producer is hard put to it. It merely means that, in periods of cyclical overproduction of copper, the price hazard attaching to the manufacture of copper products decreases as the amount of copper used in the product decreases.

Automobile Industry's Costs.—There is another aspect of the situation which can best be illustrated by the automobile industry.

Taking prices and weights throughout the trade, from Fords to Cadillacs, it appears that during 1928 automobiles, on the average, sold at somewhere around 33 cents per pound. The steel which goes into the body, axles, engine, etc., probably costs less than 3 cents per pound—and steel is the predominant metal used in automobile construction. The copper costs, say, 15

cents per pound; the lead around 6 cents; the hard wood around 1 cent; the crude rubber in the tires, say, 30 cents.

The remainder of the price is accounted for by value added by manufacture (and by sales effort).

Theoretically, the percentage of ultimate selling price added by the manufacturing and selling processes would have remained the same had raw material costs been considerably higher. But if in 1928 steel prices had run above 5 cents, copper prices above 35 cents, and lead prices above 11 cents, as they all did at certain periods in 1917, and if crude rubber prices had run above \$1 per pound, as in 1927, it certainly would not have been possible to have sold some 4½ million automobiles at an average price of around 33 cents per pound in 1927.

And also, had it been necessary to increase the average price of automobiles to 50 cents per pound or higher, it assuredly would not have been possible to have sold AS MANY as 4½ million automobiles in 1928.

Cheap Coal.—During the past two years bituminous coal prices have averaged about \$2 per ton at the mines. Throughout 1920 the average price was better than \$5.50 per ton.

Would the enormous extension in the electrical utility field, which has occurred since 1920,

have been possible if coal prices during the period had averaged above \$5.50? Our opinion is that it would not have been possible—that the cost of producing electrical energy would have been so materially higher than it now is that consumer demand would have expanded much less rapidly.

(And had the extension of the utilities' service been less rapid, the prosperity of the electrical equipment industry, and several other allied trades, would have likewise run on a lower level.)

Lower Prices—Larger Sales.—These examples are sufficient to illustrate the point. Our contention is:

That overdevelopment of natural resources means that American manufacturers during recent years have had at their command not only an adequate supply of raw materials, but a supply which has been constantly available at a relatively low price. This has made it possible for manufacturers to reduce their own costs, their ultimate selling prices, therewith to increase their total volumes, and therewith also to increase the size of their profits.

There is no claim that the thesis which revolves about the overdevelopment of natural resources supplies anything like a single key to the American industrial enigma. But we do hold

that, as industry is now organized, the overdevelopment of natural resources, occasioning cyclical periods of overproduction and low prices, has been one of the outstanding factors in the variation of the results of industrial corporations as a group.

The Character of the Data

The results achieved by a given line of industry are usually reported in terms of tons, pounds, bushels, yards, or what not, and in terms of the prices at which the products sell.

The results achieved by a specific corporation are almost invariably reported (when they are reported at all) in dollar terms, in the income account and balance sheet.

It is upon data of the latter type that the bulk of the preceding study has been based. Dollar results, as set forth by various concerns in their official financial statements, have been reported; there has been no other possible assumption than that these data reflect actual conditions. And, indeed, it is our opinion that in the main and when the data are taken in representatively large groups, they do report actualities to a marked degree.

But if those who frame corporation reports wished them to do so, they could be made to

report conditions much more faithfully. Moreover, in many specific cases, the official report that is emitted reflects such a small fraction of the actual situation that it is only a little better than no report at all.

In several important respects, no criticism of the abuses that exist can be too harsh. We have in mind especially the following three prevailing characteristics of industrial financial reports, and we feel justified in asserting that the criticisms apply not to an insignificant minority, but to a majority of all the reports which are annually published:

Inadequacy.—We contend that the average corporation report is not merely inadequate, but woefully inadequate; that it does not give the security owner the information to which he is entitled, and that it does not give him all of the information that is necessary if he is to make a competent decision as to whether the securities he owns should be held or disposed of. And if it is not the primary function of corporation reports to give precisely these data, then we admit that we are quite at a loss to understand what type of information corporation reports are really intended to convey.

It is granted that the question as to whether gross income should be reported is open to debate, although we contend that the cases in

which gross could be reported without harm are manyfold fewer than they are generally assumed to be. But no impartial observer will admit that there is any valid excuse whatsoever for the numerous other omissions of vital data which are so commonly countenanced. The extent and frequency of these omissions cannot be fully appreciated until close examination and comparison of a large number of specific corporation reports has been made; throughout such a study the seriousness of the situation stridently announces itself.

Lack of Uniformity.—To the sin of omission is added the sin of disorder and irregularity. A issues his annual statement in the form that best suits his purpose; B does the same and so does C. A few of the major items, of course, are common to all statements. But in the minor items there is such a perplexing medley of combination that item-by-item comparison is often impossible.

Not only is there a lack of uniformity in financial reports as between one industry and another, but there is a wide variation in form as between various concerns in the same industry, and in some cases there is a sharp difference in the form of report issued by a single concern in two successive years—with no effort whatsoever to make comparison possible.

All of this results in thoroughgoing confusion. It blocks careful study. It sets up barriers for which there is not the slightest necessity.

Complete uniformity of style of reports throughout industry as a whole would, of course, be impossible. A much greater degree of uniformity than now exists would be simple of achievement, would harm no one, and would prove of inestimable value to the several millions of security owners throughout the country who are continually wrestling with the problem of values.

Lack of Explanation.—The third general criticism of corporation financial statements is that, even where a given report is adequate and comparable in form with the previous report, its compilers seldom go to the trouble to explain significant changes in important items. It is essential to do so, because anyone who is analyzing the report will immediately raise the question as to whether significant change has been due to a basic alteration in the trend of the corporation's business, or merely to a revision in accounting practice.

In other words, there are numerous cases in which all the figures are not enough. The corporation which really wishes to keep its stockholders informed will take pains to explain important changes in reported results. Without

this vital explanation, which in many cases only the management of the corporation can give, even the most adequate figures often become meaningless.

A Challenge.—The foregoing criticisms, which we have taken pains to make general in nature, and to direct against no specific individual concern or group of concerns, are believed to be valid so far as the aggregate, or average, situation is concerned. And even such general criticism may well provoke a challenge—a challenge to set forth what might be regarded as an “ideal” financial report.

That challenge is accepted, but its acceptance confers not the right to become dogmatic, not the right to shout “thou shalt” or “thou shalt not,” but merely the privilege of expressing an *opinion* as to what a financial report should contain if it is to give the intelligent security owner all of the information he should have to form a competent opinion as to his company’s affairs.

Following is an outline of what we would regard as an “ideal” report to be emitted by the average industrial corporation the securities of which are held by the public. Many individual exceptions can be made; some of them might be quite valid. What we have had in mind has been the average situation, rather than the situation of any specific concern.

Throughout the outline, also, we have sought not only to define the various items in the report, but to present the definitions in such a way that they will also carry meaning for the average layman not accustomed to dealing with technical accounting problems.

“Ideal” Financial Report for the Average Industrial Corporation *

(Since it is one of the functions of the financial report to make possible the detection of year-to-year change—the measurement of trend—both the income account and the balance sheet should report comparable data for at least TWO YEARS—the latest year and the one immediately preceding.)

INCOME ACCOUNT

1. GROSS REVENUE OR GROSS SALES—Not unless the security owner has a record of gross can he arrive at an understanding of the meaning of the net income figure. In many cases, not unless he has a long-term record of gross can he determine whether his company is a growing or a decadent one. Gross must be the starting point of every income report; in only a minority of cases is it now the starting point of that portion of the income account which *is made public*.
2. OPERATING EXPENSES OR COST OF SALES—Should be subdivided under two heads:
 - (a) Cost of production;

* Compiled by Mr. Harold G. Parker and Ivan S. Dobson, of the Standard Statistics Co.

- (b) General selling and administrative expense; (where taxes other than Federal are a major item, they should be reported separately).

Such a subdivision makes possible a check and analysis of the most important elements in cost. The ratio between gross revenue and operating expense over a period of time is a very significant one; detailed information as to costs makes it possible to explain variations in this ratio.

3. EXPENDITURES FOR MAINTENANCE, ETC.—Should always be separated from other elements in total costs. The value of the figure lies in the fact that it gives a clue as to whether property is being kept in first-class condition, and as to whether expenditures in a given period are subnormal, normal or supranormal.
4. OPERATING INCOME—Obtained by deducting Items 2 and 3 from Item 1. Reports the amount of profit derived directly from the operation of the business.
5. OTHER INCOME—Including all profits other than from operations, such as bank interest, dividends on securities owned, etc. Profit on sale of any current assets, such as securities, should be itemized separately. If "other income" is not reported separately, and in detail, the security owner has no basis for judging what proportion of total income is likely to be nonrecurrent.
6. TOTAL INCOME—The sum of Items 4 and 5.
7. DEPRECIATION, DEPLETION, OBSOLESCENCE, RESERVES, ETC.—This account is one which is much and frequently abused. Refer to special analysis dealing with the item. Details of this reserve should be listed separately in the income account.
8. FEDERAL TAXES—This item is computed after allowing for income charges, but it ranks ahead of these charges in payment, after the fiscal year is ended.

9. OTHER DEDUCTIONS—Such as inventory adjustments, loss on sale of any current assets, and all other deductions which can be classed as legitimate charges against the business for a given year. Reserves for probable losses on inventories and receivables should also be shown here. (Full details should be shown.)
10. NET PROFIT—Item 6 minus Items 7, 8, and 9.
11. FIXED CHARGES—Including bond interest, other interest, amortization of bond discount, subsidiary preferred dividends, and bond sinking funds. (Details.)
12. NET INCOME—Net profit minus fixed charges.
13. PREFERRED DIVIDENDS—Amount paid in cash.
14. COMMON DIVIDENDS—Amount paid in cash.
15. BALANCE AFTER DIVIDENDS.
16. SURPLUS CREDITS—Including all items such as profit on sale of capital assets, transfers to surplus from any reserves, credit adjustments of any prior year's items, etc. (In detail.)
17. SURPLUS DEBITS—Including stock dividends, reduction in stated value of good will, loss on sale of capital assets, etc. (In detail.)
18. NET INCREASE OR DECREASE IN SURPLUS DURING YEAR—Sum of Items 15 and 16, minus Item 17.
19. SURPLUS BALANCE CARRIED FORWARD FROM PREVIOUS YEAR—As shown in previous year's balance sheet.
20. BALANCE IN SURPLUS ACCOUNT AT END OF CURRENT YEAR—Sum of Items 18 and 19.

BALANCE SHEET

Assets

1. PROPERTY ACCOUNT—Should be stated whether value assigned is at cost or appraised value. Reserves for depreciation, depletion, obsolescence, etc., should be noted separately.

2. LONG TERM INVESTMENTS—Statement should specify whether investments are carried at cost or market, and investments in subsidiaries should be reported separately. Full list of investments of this type should be published at least annually. Any major change in holdings from one year to the next should be explained.
3. INTANGIBLES—Should be detailed, viz.:
 - (a) Good will.
 - (b) Patents.
 - (c) Leasehold value.
 - (d) Unamortized bond discount.
 - (e) Other.
4. ADVANTAGES OR LONG TERM ACCOUNTS RECEIVABLE—Should be segregated, so that differentiation can be made between advances to subsidiaries and others. The necessity for such advances should be explained.
5. PREPAYMENTS—Such as insurance, taxes, etc.
6. OTHER ASSETS—Such as real estate not used in operation, employees' stock subscriptions, etc.
7. CURRENT ASSETS—Should be subdivided as follows:
 - (a) Cash in banks and on hand.
 - (b) Government securities.
 - (c) Other temporary investments, such as marketable securities, demand, call, and time loans, etc. Should be reported at market value. If marketable securities constitute a large proportion of total assets, details of holdings should be shown.
 - (d) Accounts receivable (trade).
 - (e) Temporary advances to subsidiaries.
 - (f) Inventories: (1) finished goods; (2) goods in process; (3) materials and supplies.

- (g) Other current assets, such as cash surrender value of insurance policies, etc.

8. TOTAL ASSETS.

Liabilities

9. **PREFERRED STOCK**—Details should be given if preferred is of more than one class. If it carries no par value, the liquidation value and the number of shares outstanding should be stated.
10. **COMMON STOCK**—Should be reported as an item separate from surplus, regardless of whether the issue carries a par or no par value. Number of shares outstanding should be stated. If common is of more than one class, proper distinction should be made.
11. **FUNDED DEBT**—Complete list, with details as to coupon, maturity dates, etc., should be carried either in the balance sheet or in the annual report accompanying.
12. **OTHER LONG-TERM OBLIGATIONS**—Should be segregated as to subsidiaries and others, with full explanation.
13. **RESERVES**—This item should report only reserves which are set up against fixed assets and reserves for general contingencies. Reserves set up against current assets should be reported under current liabilities.
14. **OTHER OBLIGATIONS**—Such as deposits returnable only under special conditions, etc.
15. **SURPLUS**—Subdivided as follows:
 (a) Capital and appreciated surplus.

- (b) Appropriated surplus (for improvements, sinking funds, etc.).
 - (c) Earned surplus.
16. CURRENT LIABILITIES—Should be subdivided as follows:
- (a) Loans payable to banks.
 - (b) Notes payable (trade).
 - (c) Accounts payable.
 - (d) Temporary loans from subsidiary companies.
 - (e) Accrued expenses—interest, taxes, dividends, insurance, etc.
 - (f) Tax reserves (Federal and other).
 - (g) Current reserves—against receivables, inventories, etc. Details should appear.
 - (h) Dividends payable.
 - (i) Other current liabilities.
17. TOTAL LIABILITIES.
18. CONTINGENT LIABILITIES—Any guarantee or endorsement to which the company is committed should be reported in detail.

THE ANNUAL REPORT

A number of corporations have already adopted the practice of appending to their annual income accounts and balance sheets a statement giving further information to stockholders. When this report is complete, it is of inestimable value in analyzing the statistical statements. It becomes particularly illuminating when it explains important *changes* that have occurred as compared with the year preceding the current one—changes in the tempo of production, in market prices for the goods that are produced or sold, in the amount of gross and net income (especially in nonrecurrent income), in dividends, fixed charges, and special adjustments, in the

property and investment accounts, in capital structure and in cash, inventories, and receivables.

It is especially important to explain changes in the surplus account. Without such an explanation, it is often virtually impossible to analyze a financial statement. The surplus account is a catch-all, offering the opportunity for many abuses. An explanation of year-to-year adjustments is essential.

Interests of Various Groups in Adequate Reports

There are many groups which have a vital interest in the production of a complete, truthful, and significant financial statement.

First of all, the corporation which issues the report has an interest in its completeness. This is vividly exemplified by the fact that the average corporation report today, despite its glaring shortcomings, is infinitely more complete than it was a decade ago.

More and more corporations are coming to realize that they accept a moral obligation when they sell their securities to the public, or when they allow their securities to be bought and sold by the public. More and more are they coming to realize that in such a circumstance there is imposed the specific obligation to give security owners not the least amount of information that they will accept, but the most that it is practical to give.

The old contention that a concern "gives aid

and comfort to its enemies" (*i.e.*, competitors) when it makes a complete and illuminating financial statement has been completely blasted. In every line of business at the present time there are a few concerns which approach the ideal in their annual statements, and these have thoroughly failed to demonstrate that their competitive position has been impaired thereby.

Aside from the moral obligation, every corporation whose securities are outstanding in the hands of the public serves its own best interest by frankness. Nothing incites suspicion and doubt more than secrecy. Failure to tell the whole truth may not constitute conscious deception, but it often actually results in deception.

Investment Banker and Public Accountant.—

The investment banker has an interest in the situation. He distributes securities. He therewith assumes an obligation jointly with the corporation which issues such securities. He can bring much more pressure to bear than he has brought in the past, and probably will do so.

The public accountant has an interest at stake. He certifies the report. It is our opinion that if any important group of public accountants would agree to insist upon certain standards of adequacy—even though that adequacy fell far short of what we have expressed as our opinion

of the ideal—that the accountants' position would be strengthened, and that the resistance would actually prove to be much milder than it is assumed to be.

Indeed, we ascribe the major portion of the unsatisfactory situation which obtains in regard to corporation statements to inertia and tradition, more than to a conscious effort to withhold information which should really be given.

We do not believe that, in any given year, more than one important industrial corporation out of a hundred issues a statement which is deliberately intended to deceive stockholders. The fact that deception occurs develops later. The great majority of corporations in all probability would be quite willing to issue much more complete statements if their managements were convinced that a real demand for such information actually existed.

The Stock Exchanges.—The various stock exchanges, of course, have an interest in the form and completeness of corporation statements. The New York Stock Exchange has been a leader in the battle for more completeness for many years, and its efforts have been intensified and especially fruitful during the past few years.

Numerous other exchanges have performed a public service in the same field—although

necessarily on a somewhat more limited scale than has been the service rendered by the largest exchange in the country. We do not believe, however, that even the New York Stock Exchange makes its requirements for listing as comprehensive as would be quite within the bounds of reasonableness. One should expect that this important exchange would still further tighten its requirements over a period of time, and that the standards of other exchanges would gradually tend to conform somewhat more closely with those of the largest exchange.

The Security Owners' Interest.—Most vital of all is the interest of security holders in a financial statement which tells the true story and the whole story. But in this group inertia reaches its maximum. A list of the security owners who have called upon the corporations, the stocks of which they own, to provide more adequate annual statements doubtless would be more interesting than lengthy. A list of those who have asked for such information and have been flatly refused would be even less lengthy.

There is no way of estimating what percentage of the stocks and bonds that changed hands during the hectic year 1928 was purchased after careful study and what proportion was purchased with no study at all—sheerly upon guess

or "hunch." But the latter named class of purchases was undeniably large. Perhaps it was predominant.

The so-called "public" has been in a hectic gambling mood for two years or so. It has become a little drunk with bullish success. To some extent, real study of industrial trends and of the specific situations of individual corporations has been pushed into the background—not by all security purchasers, by any means, but probably by the average margin trader in common stocks.

This reckless stage of the market must ultimately pass. *When* it will pass, no careful observer now attempts to guess. But it is purely a question of time—not for a single moment a question of fact.

Succeeding the period of recklessness, guess, and gambling there must ensue, as it always has in the past, a period in which not the fools equally with the wise men, but *preponderantly* the wise men, who know the most and who study the most, will be able to achieve the greatest gains in the security market. In such a period, knowledge of conditions in various lines of industry will be even more necessary than it is at the present time; knowledge of the situations of specific corporations will be even more necessary than now.

And true knowledge of the situations of specific corporations, of course, must rest squarely upon their official financial statements. The extent of such knowledge will tend to vary directly with the adequacy of the financial reports which become available.

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THE *basic* list of industrial corporations included in this study numbers 545. Throughout the study, the number is a varying quantity, due to the fact that in some of the individual items in the balance sheet or income account, comparison for the full list was not feasible.

The variation in the number should not prove a source of confusion. As a matter of fact, for all practical purposes, the shifting quantity can be disregarded. Where the number of concerns utilized in any specific section varies from 545 a statement to that effect is made, but this is more in keeping with the precepts of academic accuracy than because the aggregate results would be vastly different.

Briefly stated, the central purpose has been to utilize, in each section of the study, as many corporation income accounts and balance sheets as possible.

The most frequent variation is between 545 and 544, due to the fact that the Standard Oil Company of New Jersey changed its capital structure and accounting methods radically in 1927. This change had no bearing upon the income account. It did have a bearing upon the balance sheet. Therefore, in reporting aggregate income items Standard Oil of New Jersey was generally included, and in reporting aggregate balance-sheet items it was generally excluded. We were anxious to include the company as frequently as possible, not only because of its

importance in the oil industry, but because of its important place in American industry as a whole.

In the study of the percentage of gross saved for net, and in that chapter which appears under the heading "The Fifty Club," it was found feasible to compare slightly more than the 545 concerns on the basic list. Here again the purpose was to make the results as inclusive and as comprehensive as possible. No confusion need result. Unity and consistency have been achieved by being certain that, wherever results reported in one section of the study are being compared with those reported in another section, only data for identical concerns are employed.

The following list reports all of the corporations that were employed in the study. Those which are not preceded by the asterisk symbol (*) are on the basic list of 545. Those which are preceded by the asterisk are in addition to this list, and were utilized in Chapter V or XV.

Where no page reference appears after the name of a given concern, the inference is that, despite the fact that this concern's name appeared on our basic list, there was no occasion to mention it specifically in this volume.

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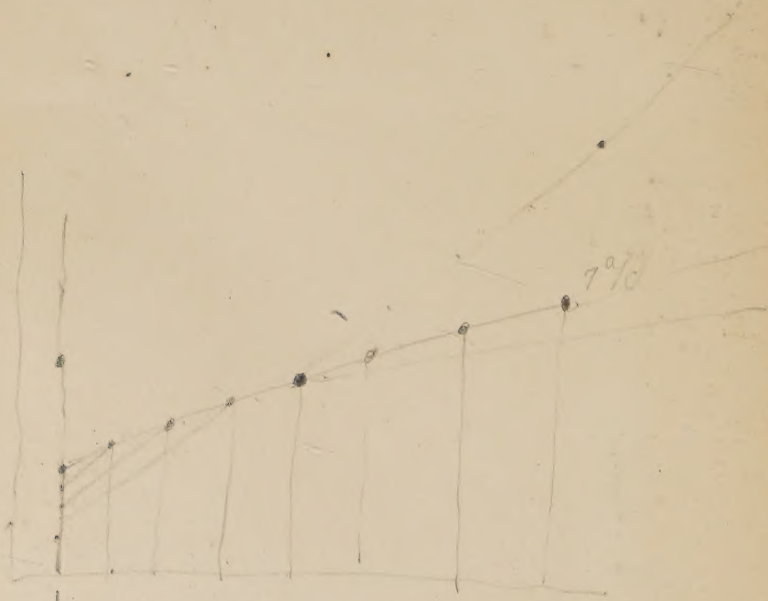
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